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ABSTRACT

The High Technology Center at Francis Tuttle Vo-Tech Center in Oklahoma City conducted an 18-month demonstration program, beginning in January 1989, to train or retrain average workers, unemployed because of cutbacks in their field or lack of marketable skills, for careers in high technology. The High Technology Center offered adults training in one of five electronically-based fields: microprocessor maintenance and repair, computer-aided drafting, instrumentation and control, automated manufacturing/robotics, and computer numeric control machining. These courses were taught on an open-entry and self-paced instruction basis and completion time varied considerably. Tuition assistance was available for those who did not qualify for other types of federal funding. All students were tested to determine their level of proficiency in mathematics and reading, and a pretechnology laboratory was established for those needing review. Partnerships with industry allowed professional input to curriculum and short-term training internships for selected students. A job bank was established and resume/job search seminars were conducted. All goals of the project were met or are being met as scheduled. More than 400 persons were served during the 18-month period. More than 85 percent of the 38 completers were placed in technology positions in industry. (Ten appendixes to this report include information on the integrated learning system; statistical summaries of scores on Tests of Adult Basic Education; information on lab assignment, the internship program, and placement; recruitment information by age, sex, race, and education level; a third-party evaluation report; and a financial status report.) (KC)

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HIGH TECHNOLOGY PARTNERSHIP PROJECT

Francis Tuttle
Vo-Tech

CE 056 908

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
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FOREWORD

The general goal of the federally funded Cooperative Demonstration Program is to determine and evaluate reproducible models of training and retraining of clients in broad based educational technology programs while partnering with industry. Over forty programs were funded for an eighteen month period beginning in January 1989. Francis Tuttle Vo-Tech High Technology Center in Oklahoma City, Oklahoma, was invited to submit a grant proposal by the U. S. Department of Education. The High Tech Center was awarded over $395,000 in direct funds from the federal government and was required to allocate more than $100,000 in matching funds.

Francis Tuttle Vo-Tech District I-21 was formed in May 1979. Secondary students from five independent school districts attend the Center. The five independent school districts are Crescent, Deer Creek, Edmond, Putnam City, and Western Heights. Adult students are drawn from the Oklahoma City metropolitan area and from surrounding communities.

The High Tech Center at Francis Tuttle opened its doors in January 1985. The primary mission of the High Tech Center is to train adult students to become technicians in five program areas. Throughout the duration of the Cooperative Demonstration Grant, the High Tech Center offered five program areas of study to participating students. The five program areas are:

- AUTOMATED MANUFACTURING/ROBOTICS TECHNICIAN,
- INSTRUMENTATION AND CONTROL TECHNICIAN,
- CADD/CAM SPECIALIST,
- MICROCOMPUTER TECHNICIAN, and
- CNC MACHINING TECHNOLOGIST.

I. INTRODUCTION

A. Background Information on Francis Tuttle Vo-Tech Center

The mission of Francis Tuttle Vo-Tech Center is to provide quality training in vocational and technical skill areas to both high school and adult students. The key ingredient in the mission of the Center is Excellence. The mission begins with academic excellence through an individualized, performance-based curriculum. It continues with excellence in the Center's handling of new and emerging technologies through its High Tech Center programs. The Center reaches its pinnacle in excellence through its partnership with business and industry, which is designed to meet the needs of students and the community it serves.

Daytime classes for students enrolled in non-high technology programs began at Francis Tuttle in August 1982. High Tech classes started in January 1985. The first High Tech students completed their programs of study during the 1986-87 school year. Students that participated in the Demonstration Grant were either existing students or students recruited beginning January 1989 through May 1990.

Francis Tuttle is committed to individualized, performance-based instruction. Programs are structured on an open-entry, open-exit, self-paced basis. A student may enroll at various entry points throughout the year and progress through the course at their own pace and ability.

This approach requires the instructor to develop Learning Activity Packets (LAPs) that guide students through a series of tasks until they reach an acceptable level of

proficiency. Audiovisual materials, computer-assisted instruction, and computer-assisted interactive video instruction are also utilized in the Learning Activity Packets (LAPs).

Another integral part of the Francis Tuttle experience is the Learning Resource Center (Learning Lab). The Learning Lab provides assistance to all students in improving math, reading and communication skills. An individualized, computer literacy program provides students with an introduction to the IBM Personal Computer. Adult students who needed enhancement in basic skills obtained this enrichment through use of a sophistacted technology driven software program and one-on-one tutoring sessions.

The High Tech Center's program of study is divided into core curriculum courses and specialized technology course work. Both course areas use Learning Activity Packets. All High Tech students are involved in this self-paced method of instruction. High Tech students participate in Learning Lab activities as needed.

B. Purpose and Scope of Program

The design of the Demonstration Grant was based on meeting certain workplace skill needs resulting from dramatic economic changes in the state of Oklahoma. When the High Tech Center first opened, Oklahoma was experiencing a serious economic slow down due to the drop in oil prices.

Oklahoma historically has had two major industries, agriculture and the oil and gas industry. During the oil bust, many dislocated oil and gas workers were in need of retraining for competitive employment. The skill level of these workers ranged from engineers with master degrees to laborers in oil-related jobs with academic skills below sixth grade level.

Our performance-based, self-paced, individualized delivery system assisted in meeting the needs inherent to such a varied student population. However, the highly skilled dislocated worker pool quickly ran dry causing our students to fall within the low to average skill level range.

The changing demographics of incoming students and the changing needs of the Oklahoma work force caused the High Tech staff to reassess the Center's academic delivery system. The total delivery system was sound but the need for some fine-tuning was evident.

The reassessment identified several critical needs. Francis Tuttle is just like most educational institutions in that the need for funding changes was the major issue. The High Tech Center staff began the search for funding that would allow some experimentation in the implementation of new and innovative approaches to vocational education. This funding search brought about the acceptance of the invitation to participate in the Federal Demonstration Grant application process.

The needs identified through the assessment fell under three general categories. The first need dealt with identifying and assessing the Oklahoma work force. The second need dealt with developing a partnership between education and business and industry. It was determined that the partnership between vocational education and business and industry must be designed to validate thehigh technology training was meeting the needs of the various businesses and industries in Oklahoma.

The third need centered on the demand for increased support services for High Tech students. This need resulted from the drastic change in the range of educational and work

experience levels of the pool of potential high tech students. Incoming assessment of students indicated that many had questionable math and reading skills.

C. Questions to be Addressed

The Demonstration Grant, High Tech Partnership Project (Partnership Project), was designed to answer whether Francis Tuttle High Tech Center could train or retrain students possessing limited technological skills coupled with an educational background ranging from college to non-high school graduates. The Demonstration Grant was also designed to test several of the High Tech Center's innovative program approaches and methods. These methods and approaches include:

1. Aggressive Recruitment and Intake of New Students
2. Aggressive Assessment of New Students
3. Implementation of a New Computerized Basic Educational skills program to be located in the High Tech Center
4. Revamping of the Technical Curriculum including changes made in the core curriculum delivery system
5. Implementation of Associate Degree Program
6. Development of Counseling and Support Services
7. Implementation of an Internship Program
8. Job Development and Placement Programs

D. Goals: Partnership Project Program Objectives

The Partnership Project had four (4) primary objectives. The following is a summary of these objectives and a listing of the original time guidelines for each objective. Information on changes in objectives and altered time guidelines are included.

The first objective was to increase the number of students enrolled in High Technology programs by fifty percent (50%). The Project started on January 3, 1989 with 104 daytime students already enrolled in High Technology courses.

The first objective relates to the recruitment campaign. The recruitment campaign

was to begin on January 3, 1989 and to end on September 30, 1989. The actual campaign did not start until the first week of February 1989. The delay was caused by the January 16, 1989 starting date of the Program Specialist and the Recruitment and Placement Specialist.

The aggressive recruitment campaign came to a successful end during May 1989. The initial campaign was so successful that recruitment changed to replacement recruitment. Replacement recruitment was used to fill vacancies created by students completing and students who dropped out of the High Tech programs.

The second objective dealt with the upgrading of the reading and math levels of 75% of the disadvantaged students enrolling in High Tech programs. This objective sought to increase disadvantaged students' overall reading and math skills to an eleventh grade level. The Test of Adult Basic Education (TABE) assessment was given to all incoming High Tech students to determine their academic skill levels.

The second objective relates to the Academic Program that was to be operative for the duration of the project, January 3, 1989 to June 30, 1990. The Academic Program was delayed because the Academic Program Instructor did not come on board until the middle of February 1989. The Academic Program was further hampered by the delay in receiving, installing, and training of personnel on the computerized academic training program. The actual duration of the Academic Program was from March 1989 to June 29, 1990.

The third objective relates to the development of an internship program with various recruited businesses and industries. The original time guideline for the internship program was January 3, 1989 through October 31, 1989.

The time guideline for the internships were completely altered to reflect an overall evaluation of the completed Partnership Project. The High Tech staff wanted to measure the effectiveness of the recruitment programs, the academic programs and the technology programs impact on the quality and performance of the selected interns.

It became evident that all the other various programs in the Project had to be effectively implemented before the intern selection process could occur. The administrative part of the internship was developed and put into place from August 1989 to November 1989. The selection, placement, and on site time for the interns occurred from January 1990, through June 15, 1990.

To place 85% of all students completing their program of study in training related jobs was objective four. Job placement activities of the project were scheduled to begin October 1, 1989 and to end on June 30, 1990.

All programs in the High Tech Center are self-paced and competency-based. This method of instruction allows a wide range of completion dates and some students were completing as early as Summer 1989. This wide range of completion caused the placement program to be geared up early. Actual placement program activities started in May 1989.

E. Staff

The funds received under the Demonstration Grant allowed the High Tech Center to hire, for an eighteen month duration, three professional and one support staff persons. The support staff position was a full time secretary.

The three professional staff positions consisted of a Program Specialist, Program Recruitment and Placement Specialist, and a Learning Lab/Math instructor. The Program

Specialist had the responsibility of supervising the day-to-day activities of the grant.

Other High Tech management personnel involved in the day-to-day management of the program included the Assistant Superintendent of the High Tech Center and the Director of the High Tech Center. The Partnership Project also utilized services of several other departments at Francis Tuttle.

Both the Public Relations Department and Career Services Department provided essential educational supportive services to the Partnership Project's staff and students. Probably the most important contribution made to the Project by Francis Tuttle staff not funded by the grant, was the instructional and training services provided by the excellent professional teaching staff of the High Tech Center.

F. Budget

The following is a summarized version of the Partnership Project's budget:

Budget Category	Amount	% of Total Budget
Staff	$ 304,027 *	61.32%
Travel	$ 8,300	1.7 %
Supplies	$ 25,000	5.04%
Student Services	$ 110,000 **	22.18%
Recruitment	$ 17,617	3.55%
Third Party Evaluator	$ 1,500	0.3 %
Indirect Costs	$ 29,316	5.91%
Totals	$ 495,760	100.00%

* Includes $100,000.00 of Francis Tuttle Funds.

** Includes internship awards for 20 students and tuition funds.

II. PROGRAM

A. Recruitment

The Partnership Project began on January 3, 1989. At this time the enrollment at the High Tech Center was 104 full-time and part-time students. Low enrollment caused the Center to have a pressing need for an aggressive recruitment campaign.

The Recruitment and Placement Specialist in conjunction with both the Career Services and the Public Relations Departments developed and implemented a recruitment plan. This plan resulted in a large increase in the High Technology Center's student population.

The recruitment, funded with Partnership Grant funds, consisted of an intensive television, radio, and print media campaign. The Recruitment and Placement Specialist also developed lineage with surrounding area state employment agencies and other agencies that assist unemployed Oklahomans.

The Specialist sought out various minority agencies in an attempt to increase the minority population of the High Tech Center. This activity was not as successful as planned. The geographical location of Francis Tuttle probably played a significant part in the failure to greatly increase the various minority populations.

Overall the recruitment program was very successful. The recruitment program was originally designed to continue throughout the duration of the project. Recruitment was so successful in a short period of time that aggressive recruitment was terminated after approximately three months.

The statistical breakdown of the student body population for the Partnership Project was as follows:

TOTAL NUMBER OF STUDENTS SERVED

Existing Students	Recruited Students	Total Students
1/3/89	1/3/89-5/30/90	5/30/90
104	323	427

Student Gender Breakout	
Male 327	Female 100
Ethnic Background	
White	386
Black	13
Hispanic	3
Asian	17
American Indian	3
Other	5

B. Intake, Assessment, Counseling and Support Services

All students began their intake process with Career Services. Career Services have Career Specialists that interview students and help students to determine their educational and training program placements.

Career Services also assisted students in locating educational funding sources and directed students to the Francis Tuttle testing center. Students maintained a close relationship with Career Services throughout their course of study.

All new High Tech students had their educational skills assessed by the Learning Center. This assessment determined whether students can go directly into technology training or if they need to enhance their basic academic skills.

The assessment tool is the Test of Adult Basic Education (TABE). The test is approximately four hours long and covers reading, other language skills, and math.

If a student needs to enhance his/her basic academic skills he/she are placed in the High Tech Learning Lab (LAB) according to the individual's needs. A student could possibly be placed in the LAB for as little as an hour per day or for as much as six hours per day. The normal week for a High Tech full-time student was six hours per day, five days per week.

The Learning Lab instructor gave each new student that was assigned to the LAB additional assessment tests based on the software program of the LAB's computer-based learning system. All LAB students are reassessed periodically to determine their progress. A statistical determined number of students were reassessed using the TABE as an evaluation instrument to measure the overall effectiveness of the academic component of the Partnership Project.

C. <u>High Tech Learning LAB</u>

The Learning LAB instructor was responsible for implementing the self-paced individualized academic program utilizing the Education System Corporation's (ESC)

Integrated Learning System. The instructor also coordinated with High Tech instructors in the applications of the academic program in the technical areas.

The ESC is a system of IBM PS/2 Model 30 personal computers which utilize a CD-ROM based server to deliver computer-assisted instruction in math and reading to meet a student's specific need. The computer instruction was individualized for each person, and the student's work at his/her own pace. Additional information on the ESC system is in **Appendix 1.**

D. Technical Curriculum

The technical curriculum is the heart of the program. Programs offered at the High Tech Center are two year programs. All courses in the various specialty programs are designed to give the student hands-on experience with the most up-to-date equipment available. Students that complete their programs and find employment are often told that they are being hired because of their training on state-of-the-art equipment. Frequently the hiring company is just now putting new equipment into production or has the desire to purchase new state-of-the-art equipment.

The technical curriculum is divided into two major areas. The areas are the core subjects that all students must take. The core subjects are sub-divided into the basic core courses and the technical core courses. The other major area of study is the specialty subject areas.

1) Core Subjects

The basic core subjects consist of the technical math courses and computer fundamentals. The technical core subjects include various electronics courses for most

students and other technical core courses.

The technical math courses are unique in that they expose students to the areas of algebra and other higher mathematics needed to build the students' knowledge of technology. The typical theory that goes with higher mathematics is not emphasized.

Familiarity with computers is essential to every specialty program at the High Tech Center. All specialty programs require the mastery of basic computer operations and most require the mastery of programming in an elementary computer language.

Electronics is the building block for the majority of the specialty programs. Most technologies are electronically based. Mastery of electronic concepts is necessary for the understanding of the world of technology.

2) Specialty Subjects

The following is a summary of the various specialty subject areas offered at the High Tech Center.

AUTOMATED MANUFACTURING/ROBOTICS TECHNICIAN

Technicians operate, test, troubleshoot, modify, repair and adapt appropriate systems and system components. Technicians in this field also have an understanding of the role of computer-aided design, robotics and computer-controlled machining in the operation of a partially or fully-automated plant.

INSTRUMENTATION AND CONTROL TECHNICIAN

Interdisciplinary skills in the use of microprocessors and electronic, mechanical, electromechanical, hydraulic and pneumatic devices in control systems are used in this technical field. Students learn to fabricate, assemble, test, troubleshoot, repair and adapt, control systems loops and components.

CADD/CAM SPECIALIST

Working on computer-aided drafting systems including AutoCAD software, students learn to create, modify, store, retrieve, plot and manage drawing files. CAM operators are employed in the machine and manufacturing fields.

MICROCOMPUTER TECHNICIAN

Technicians have a knowledge of digital electronics and understand the function and applications of microprocessors, peripherals and the software associated with these microcomputers. Technicians program, modify, troubleshoot, repair, interface and adapt computers and interfacing equipment.

CNC MACHINING TECHNOLOGIST

Advanced training is available for individuals having a background in machine shop basics. Learn to program computerized numerically-controlled machines, set up machines from a given program and tool sheet. In addition, students learn to program manually machines from a given blueprint and develop computer-assisted programs.

E. General Education Courses (OKCCC and Francis Tuttle High Tech Cooperative Program)

When the High Tech staff made their initial assessment of the needs of business and industry in Francis Tuttle's service area, one item kept appearing. This item was the need for technicians and technologists to have college course work or an associate degree.

One of the goals for the High Tech Center's 1988-89 academic year was the implementation of a cooperative agreement with OKCCC for an associate degree program. Francis Tuttle and Oklahoma City Community College (OKCCC) signed an agreement and began implementation of a cooperative enrollment program during the Spring semester of the 1988-89 academic year.

The program is designed so that students can receive college credits for the technology courses taught at the Francis Tuttle High Tech Center. The two institutions have arranged for OKCCC professors to teach general education courses required for an associate degree on the Francis Tuttle campus.

The High Tech instructors and the OKCCC professors worked many hours to have the technology courses certified under college and university standards by the State Board of Higher Regents. Presently, associate degree programs are offered in all five of the High

Tech Specialty Programs.

The general education courses taught at Francis Tuttle by OKCCC professors have included College Algebra, U. S. History, Technical Report Writing, Government, Physics, Trigonometry, and college level English courses. Additional information on the success of the Cooperative Agreement Program is in **Appendix 2.**

F. Internship and Partnership Companies

In a highly competitive employment market, potential applicants need an edge. We believe that the Internship program developed with the cooperation of businesses and industries gave Francis Tuttle High Tech students this edge. While assessing business needs, High Tech staff members would ask employees, what do you look for on an applicant's resume? Many of the employers said that they looked for connecting work experience.

The internship program was developed so completers of the training programs at the High Tech Center would be competitive. The internship program was designed to meet the needs of the employer and give the student on-the-job-training (OJT) experience.

Before the Partnership Project there was very little cooperation with industry in structuring a performance-based training environment for when a student was placed in on-the-job-training or in a job. Cooperation between the Center and various participating industries lead to the development of these internship programs.

The program was designed with the knowledge that during the first ten to fifteen months of the project, students would be completing their academic and technical skills training program. During this lead time, staff recruited and then worked with companies

in the development of the performance-based internships. Francis Tuttle High Tech Center worked with five companies willing to sign letters of commitment to the various Project activities before the federal grant was awarded. High Tech staff, with the cooperation of potential internship companies:

1. identified the specific jobs that could be offered as internships;
2. completed a job analysis for each identified job;
3. developed performance standards for each internship;
4. developed criteria for student application to the internship program; and
5. established criteria for successful completion of the internship.

Student participation in the internship program was very competitive.

Potential intern pools for each of the five training programs were identified by the appropriate instructors. Grades, attendance, personal attitude, and availability of the applicant all were part of the selection process. Student availability played an important part in the selection process because many High Tech students worked either full or part-time.

After the initial screening by High Tech staff and the acceptance of the invitation to compete by the student, interviews by potential internship companies were arranged. Several companies were so familiar with the quality of our students and the expertise of High Tech instructors that they declined to interview and accepted all referred applicants.

Based on the performance goals established for each internship, those students completing their program successfully received a $500 stipend and were considered for full-time employment by the company if vacancies existed.

Companies were recruited based on the pool of potential completers. For an example, if there were many CADD completers then the Recruitment and Placement Specialist would recruit companies with employment opportunities that would fit the needs of our CADD completers. Seven companies participated in the internship program.

G. Job Development and Placement

Job development activities included:

1. development of interviewing seminars and videotapes;
2. mail outs to area employers informing them about the types of training and various potential High Tech completers;
3. development of a computer-based job bank;
4. participation in local job fairs;
5. resume writing assistance for students;
6. coordination with local Chambers of Commerce and other state and local agencies involved in state economic development activities to identify job opportunities in the high tech field; and
7. marketing with individual companies.

H. Dissemination of Partnership Project Information

Project staff members were involved in three types of Project dissemination activities. These three activities included attended two major conventions and the day to day dissemination of materials in the Oklahoma City metropolitan area.

The first convention attended was the 1989 American Vocational Association (AVA) held in Orlando, Florida, in December. The second convention attended was the 70th

Annual Convention of the American Association of Community and Junior Colleges (AACJC).

The Partnership Project staff set up a booth for the duration of the AACJC convention. Over 1,000 brochures were shared with collegial conventioneers.

III. EVALUATION

A. Program Outcomes, Summary and Evaluation of Data

1. Recruitment

The aggressive recruitment program was very successful. Beginning enrollment on January 3, 1989 was 104 students. The enrollment was quickly increased to 211 students by May 1989. This more than doubled the student population. The original goal was to increase the student population by 50%.

The highest recorded enrollment figures occurred in October 1989. The High Tech student population reached an all time high of 228 students.

Over 427 students received services from the Partnership Project during the eighteen (18) month program. The figure is probably much higher since our statistics are based on students that completed at least two weeks of instruction. The total number of new students rendered services throughout the program was 323.

2. Intake and Assessment

The intake procedures at the High Tech Center were temporarily changed to withstand the large numbers of students being processed and enrolled throughout the program. Partnership Project staff initially assisted Career Services in handling the additional load. One major change was the testing of new High Tech students by the Partnership staff.

Statistical records were loosely kept on the number of students tested. The approximate number was 450 applicants.

The TABE assessment has been used for some time at Francis Tuttle Vo-Tech Center (FTVTC). The value of the test for assessing potential technical skills is limited. Also, it is believed that the test does not indicate true levels of mathematical skills required for high technology training programs. The scores on the TABE can range from 1 to 12.9 in reading, math, spelling, and other language arts categories.

Out of 184 students that received the highest possible score (12.9) in total math skill, 76 were assigned to the High Tech Learning Lab by the Academic instructor. Usually, the reason was that these students missed one or two questions in the areas of exponents or other fractional math problems. Mastery of both mathematical concepts is essential for successful completion of the Technical Math part of the core subject program.

These concerns about the TABE were discussed with both the Learning Resource Center staff and the Learning LAB staff. It is possible in the future other more technical assessments will be given to potential High Tech students. See **Appendix 3 and 4** for statistical information.

3. Learning LAB

The High Tech Learning LAB program was most successful. Over 215 out of 323 new students spent time in the High Tech Learning LAB. The time spent ranged from one hour per day for five days per week to six hours per day for five days per week. See **Appendix 3 and 4** for statistics on the LAB.

The determination of which students would attend the LAB was made by the Academic instructor after reviewing the TABE and discussing the TABE scores with the High Tech Director and various technology instructors. See **Appendix 5** for additional

information on the LAB selection process.

A very limited post-testing of Learning LAB completers indicates that the LAB experience on the average raised the students TABE scores by over 3 points. Points on the 1 to 12.9 TABE score range are equal to public school grade levels.

4. Technical Curriculum

The Partnership Project was not designed to evaluate the Technical Curriculum.

5. College Level General Education Courses

The Cooperative program between OKCCC and FTVTC was not a part of the original grant proposal, but the program was very successful throughout the Partnership Project. Several students were able to complete and be awarded Associate Degrees in Applied Science from OKCCC. The average enrollment in college general education courses for the three semesters of the Partnership Project was 71 students. See **Appendix 2** for additional information.

6. Internship and Partnership Companies

Thirty students were interviewed by the seven companies that participated in the internship program. Twenty students participated and successfully completed the internship program. Four students were hired by various internship companies. See **Appendix 6** for additional information.

7. Job Development and Placement

Job development and placement statistics were only kept for those students enrolled for the duration of the Project. Thirty-five (35) of the thirty-eight (38) completers were placed by June 15, 1990. This is a 92% placement. The original goal of the grant was to

place 85% of the completers. See **Appendix 7** and the following illustration for additional information.

STUDENT RECRUITMENT AND COMPLETERS INFORMATION

Student Data	Total Number Served	Total Completers Based on Recruited Students
Existing Students 1/3/89	104	
Recruited Students 1/3/89-5/30/90	323	38
Gender Served		
Male	327	32
Female	100	6
Ethnic Background		
White	386	37
Black	13	0
Hispanic	3	0
Asian	17	1
American Indian	3	0
Other	5	0
Total Served	427	38

(See **Appendices 8a-9d** for statistical break down on age, sex, race, and education level of the recruited students).

B. Third Party Evaluation

A copy of the third party evaluation is in **Appendix 9**. The evaluation is based on qualitative information and not quantitative data. Final statistical information on the project was not available until June 28, 1990. Since the Project Staff was terminated by FTVTC on June 29, 1990 updated information was not transferred to the third party.

IV. SUMMARY

The four (4) primary goals of the Partnership Program were met during this Demonstration Project at the Francis Tuttle Vo-Tech High Technology Center in Oklahoma City, Oklahoma.

Goal summary:

1. The number of students enrolled in the Francis Tuttle High Technology Center was increased by over fifty percent by using an aggressive recruitment campaign.

2. High Tech students who had reading and math skill levels below an eleventh grade level received academic assistance to bring those skills to a level that would allow them to succeed in a high techonology program of study.

3. Improving existing relationships with businesses and industries through the performance-based internship program allowed twenty (20) high tech completers to acquire on-the-job-training. Four interns then were hired by participating companies because of their internship performance.

4. Placement of High Technology program completers in related jobs was over the 85% goal.

APPENDICES

OVERVIEW

The ESC Integrated Learning System will meet the needs of your school and students by providing:

1. THE RIGHT TECHNOLOGY

2. THE RIGHT CURRICULUM

3. THE RIGHT SERVICE

1. The Right Technology - Including

a) The most powerful standard microcomputers with a minimum of 640K of memory. The ESC system will operate on **Apple IIGS, Tandy 1000, or IBM PS/2.**
b) **Networking** - to facilitate time on task with a total management and record keeping system
c) **CD-ROM** - to provide a total range of curriculum with over 1800 lessons
d) Audio - digitized, "life like" **speech**, the ESC system also includes recording and playback of the learner's voice responses
e) The **mouse** - a very effective input devise that increases the ease and variety of the learner's responses
f) An **"open"** system that allows the use of other third party software and use of the computers in a stand-alone mode.
g) Beautiful 16 **color** lessons with an abundance of related graphics, sound and annimation.

2. The Right Curriculum - Including:

The ESC curriculum is designed to cover the basic skills, however, in addition it is specifically designed to develop thinking skills, higher order skills and problem solving. The curriculum is designed to take advantage of the newest and most current technology.

a) A Complete Basic Skills Curriculum of over 1800 lessons in math, reading and language arts.
b) The curriculum is written and designed by nationally recognized experts.
c) Continuous revisions, updates and additions via the CD-ROM technology
d) A comprehensive management system provides diagnosis, placement, with appropriate instructional performance and progress testing.
e) The curriculum is correlated to your basal textbooks, state tests, state curriculum, and standardized achievement tests.

3. The Right Service - Including:

ESC provides hardware and software training, service and support.

a) An ESC Account Manager will be assigned to your school to provide for a smooth installation and on going training and support.
b) ESC can serve as the sole source vendor, or if you prefer, you may select the hardware of your choice from your local dealer.
c) A toll-free Technical Hotline is only a phone call away.

APPENDIX 1
ESC Information

APPENDIX 2
Cooperative Agreement Information (College Level
General Education Courses)

Date:

1-30-90

Subject:

Completion rates for General Ed classes

Five General Ed classes have been taught to completion at the FTVTC campus since January 1989. Instructors for these classes have been from OKCCC.

Semester	Total students enrolled	Total FTVTC students	Total FTVTC completers	percent from FTVTC completing
Spring 89	73	71	42	59%
Fall 89	49	41	32	78%

In the Spring '89, of the 29 students who dropped out of General Ed classes, 26 remained FTVTC students through the completion of these classes and therefore might have completed.

In the Fall '89, only 5 of the 9 drop-outs remained FTVTC students.

In my opinion, the problem seems to be alleviating itself. Perhaps counselling and monitoring is all that is necessary at this time.

NOTE: 93 FTVTC students are enrolled in group paced, OKCCC classes this Spring.

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB MATH/RE	CERTS
M	W	21	13	12.90	12.90	12.90	12.90		
F	W	23	12	12.90	12.90	12.90	12.90		ET
M	W	33	12	12.90	12.90	12.90	12.90		
M	W	31	12	12.90	12.90	12.90	12.90		
M	W	44	17	12.90	12.90	12.90	12.90		
M	W	23	14	12.90	12.90	12.90	12.90		CADD
M	W	29	12	12.90	12.90	12.90	12.90		ET/MT*
M	W	38	14	12.90	12.90	12.90	12.90		CNC
M	W	34	13	12.90	12.90	12.90	12.90		
M	W	38	16	12.90	12.90	12.90	12.90		ET/MT*
M	W	40	12	12.90	12.90	12.90	12.90		
M	W	21	14	12.90	12.90	12.90	12.90		
F	W	20	13	12.90	12.90	12.90	12.90		
M	W	32	14	12.90	12.90	12.90	12.90		
M	W	26	12	12.90	12.90	12.90	12.90		
F	W	42	16	12.90	12.90	12.90	12.90		
F	W	34	12	12.90	12.90	12.90	12.90		
M	W	35	13	12.90	12.90	12.90	12.90		
M	W	31	13	12.90	12.90	12.90	12.90		
M	W	48	12	12.90	12.90	12.90	12.90		
M	W	23	GED	12.90	12.90	12.90	12.90		CADD/CAM
M	W	22	14	12.90	12.90	12.90	12.90		
M	W	19	13	12.90	12.90	12.90	12.90		
M	W	39	12	12.90	12.90	12.90	12.90		
M	W	26	12	12.90	12.90	12.90	12.90		
M	W	30	14	12.90	12.90	12.90	12.90		
M	W	56	16	12.90	12.90	12.90	12.90		
F	B	30	14	12.90	12.90	12.90	12.90		
M	W	23	12	12.90	12.90	12.90	12.90		
F	W	47	12	12.90	12.90	12.90	12.90		
M	W	29	12	12.90	12.90	12.90	12.90		
M	W	62	14	12.90	12.90	12.90	12.90		
M	W	20	12	12.90	12.90	12.90	12.90		
M	W	17	10	12.90	12.90	12.90	12.90		
M	W	42	16	12.90	12.90	12.90	12.90		ET/MT
F	W	28	12	12.90	12.90	12.90	12.90		
M	W	34	GED	12.90	12.90	12.90	12.90		ET*
M	W	54	16	12.90	12.90	12.90	12.90		
M	W	43	12	12.90	12.90	12.90	12.90		
M	W	43	16	12.90	12.90	12.90	12.90		
M	W	40	13	12.90	12.90	12.90	12.90		
M	W	64	12	12.90	12.90	12.90	12.90		
M	W	27	14	12.90	12.90	12.90	12.90		
M	B	48	13	12.90	12.90	12.90	12.90		
M	W	34	13	12.90	12.90	12.90	12.90		
M	W	18	11	12.90	12.90	12.90	12.90		
M	W	35	14	12.90	12.90	12.90	12.90		
M	W	33	15	12.90	12.90	12.90	12.90		
M	W	38	13	12.90	12.90	12.90	12.90		
M	W	53	12	12.90	12.90	12.90	12.90		
F	W	20	GED	12.90	12.90	12.90	12.90		
M	W	29	15	12.90	12.90	12.90	12.90		
M	W	29	GED	12.90	12.90	12.90	12.90		
F	W	36	12	12.90	12.90	12.90	12.90		
F	W	38	13	12.90	12.90	12.90	12.90		
M	W	23	12	12.90	12.90	12.90	12.90		
M	W	21	12	12.90	12.90	12.90	12.90		
F	W	24	16	12.90	12.90	12.90	12.90		
M	W	22	14	12.90	12.90	12.90	12.90		
F	W	30	12	12.90	12.90	12.90	12.90		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	32	13	12.90	12.90	12.90	12.90			ET*
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	24	14	12.90	12.90	12.90	12.90			
M	W	19	12	12.90	12.90	12.90	12.90			ET*
M	W	31	12	12.90	12.90	12.90	12.90			
F	W	46	GED	12.90	12.90	12.90	12.90			
M	W	34	14	12.90	12.90	12.90	12.90			ICT
M	W	37	12	12.90	12.90	12.90	12.90			
M	W	32	12	12.90	12.90	12.90	12.90			
M	B	33	12	12.90	12.90	12.90	12.90			
F	W	38	14	12.90	12.90	12.90	12.90			CADD*
M	W	40	15	12.90	12.90	12.90	12.90			ET
M	W	38	14	12.90	12.90	12.90	12.90			ET/MT*
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	33	13	12.90	12.90	12.90	12.90			
M	W	35	16	12.90	12.90	12.90	12.90			
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	51	12	12.90	12.90	12.90	12.90			
M	W	22	11	12.90	12.90	12.90	12.90			
F	W	47	16	12.90	12.90	12.90	12.90			
M	W	36	13	12.90	12.90	12.90	12.90			
M	W	32	GED	12.90	12.90	12.90	12.90			
M	W	36	12	12.90	12.90	12.90	12.90			
M	W	34	15	12.90	12.90	12.90	12.90			
M	W	20	12	12.90	12.90	12.90	12.90			
M	W	37	10	12.90	12.90	12.90	12.90			
F	W	19	GED	12.90	12.90	12.90	12.90			
M	W	37	13	12.90	12.90	12.90	12.90			
F	W	44	14	12.90	12.90	12.90	12.90			
F	W	26	12	12.90	12.90	12.90	12.90			
M	W	46	12	12.90	12.90	12.90	12.90			
M	W	34	12	12.90	12.90	12.90	12.90			
M	W	19	11	12.90	12.90	12.90	12.90			
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	61	17	12.90	12.90	12.90	12.90			
M	W	39	12	12.90	12.90	12.90	12.90			
M	W	50	14	12.90	12.90	12.90	12.90			MT
M	W	37	16	12.90	12.90	12.90	12.90			
M	W	28	GED	12.90	12.90	12.90	12.90	L		
F	W	27	11	12.90	8.80	8.90	8.80	L		
M	W	36	14	12.90	8.40	12.90	9.90	L		
M	W	41	12	11.10	8.20	9.30	8.70	L		
M	W	40	16	12.90	10.60	9.60	9.90	L		
M	A	29	GED	6.20	7.00	12.90	8.70	L		
M	W	28	12	9.80	8.40	12.90	9.90	L		
M	W	34	14	4.70	8.40	8.90	8.60	L		
M	W	25	16	12.90	6.90	12.90	10.40	L		
M	B	38	13	12.90	6.90	12.90	8.60	L		
F	W	18	11	10.00	10.60	10.30	10.60	L		
M	W	37	10	12.90	11.50	12.90	12.90	L		
M	W	27	12	12.90	7.90	10.60	10.60	L		
M	W	34	12	12.50	8.60	8.60	8.60	L		
M	W	45	13	12.90	8.60	12.90	10.90	L		
F	W	40	11	12.90	8.20	8.90	8.60	L		
F	W	45	GED	12.90	11.50	10.30	10.90	L		
M	W	27	GED	12.90	7.30	10.30	8.60	L		
M	A	31	16	7.90	11.50	10.30	10.90	L		
M	W	40	12	12.90	9.10	12.90	12.90	L		
F	W	42	14	12.90	9.10	12.90	10.90	L		
F	W	45	12	9.60	8.40	8.60	8.50	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	52	16	12.90	10.60	11.50	11.10	L		
M	W	28	GED	12.90	12.90	12.90	12.90	L		
M	W	20	13	12.90	9.30	12.90	11.40	L		
M	W	46	GED	10.60	7.70	9.30	8.50	L		
F	W	32	16	12.90	9.30	12.90	11.40	L		
M	W	53	GED	12.90	7.20	10.30	8.50	L		
M	W	18	12	12.90	9.10	12.90	11.70	L		
M	B	31	13	7.80	8.60	8.20	8.40	L		
F	W	46	12	12.90	8.60	12.90	12.20	L		
M	W	21	12	8.10	8.20	8.60	8.40	L		
M	W	54	GED	10.60	12.90	8.90	12.20	L		
F	W	23	13	12.90	8.60	8.20	8.40	L		
F	AI	38	16	12.90	10.60	12.90	12.20	L		
M	W	35	13	12.90	12.90	12.90	12.90	L		
M	W	21	12	12.90	8.80	12.90	12.70	L		
M	W	23	12	10.20	7.50	9.30	8.40	L		
M	W	20	12	12.10	11.50	12.90	12.70	L		
M	AI	39	16	12.90	12.90	12.90	12.90	L		
M	W	41	GED	12.90	8.80	12.90	12.70	L		ET*
M	W	39	GED	8.50	7.90	8.60	8.30	L		
M	W	38	16	7.10	7.60	10.90	9.70	L		
M	W	22	13	12.90	9.10	12.90	12.90	L		
M	W	34	15	12.90	8.60	11.50	9.70	L	12.90	
M	W	36	12	12.90	12.90	12.90	12.90	L		
M	W	27	12	12.90	10.60	12.90	12.90	L		
M	A	38	16	4.20	7.70	8.60	8.20	L		
M	W	28	12	10.60	10.60	9.30	9.50	L		
M	A	39	13	4.70	7.50	8.90	8.20	L		
M	W	28	14	12.90	9.30	9.60	9.50	L		
M	W	45	16	12.01	12.90	12.90	12.90	L		
M	W	25	11	10.40	8.60	10.30	9.40	L		
M	W	20	12	12.50	8.20	8.20	8.20	L		
M	W	28	12	10.90	8.60	10.30	9.40	L		
F	W	30	GED	11.70	7.30	8.90	8.10	L		
F	W	31	15	12.90	12.90	12.90	12.90	L		CADD*
M	W	33	12	12.90	7.00	9.30	8.10	L		
M	W	46	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	32	15	12.00	12.90	12.90	12.90	L		
M	B	32	14	6.20	5.50	5.30	5.40	L		
M	W	33	12	12.90	12.90	12.90	12.90	L		
M	W	42	13	10.80	7.70	12.90	9.30	L		
M	W	30	12	11.20	12.90	12.90	12.90	L		
M	W	32	GED	12.90	9.30	12.90	12.90	L		
M	W	19	12	12.90	12.90	12.90	12.90	L		
M	A	34	GED	6.10	9.10	9.30	9.20	L		
F	W	28	12	12.90	7.50	9.60	12.90	L		
M	W	44	16	12.90	12.90	12.90	12.90	L		
M	W	33	11	12.90	6.50	11.50	8.10	L		
M	W	29	12	12.90	8.20	12.90	12.90	L		
M	A	34	14	10.00	12.90	12.90	12.90	L		
M	W	64	16	12.90	11.50	12.90	12.90	L		
M	W	36	13	12.90	12.90	12.90	12.90	L		
M	W	44	9	12.90	12.90	12.90	12.90	L		
M	W	27	12	12.90	9.10	12.90	12.90	L		
M	W	36	GED	12.90	10.60	12.90	12.90	L		
M	W	34	12	12.90	12.90	12.90	12.90	L		
M	W	47	12	12.90	8.40	9.60	9.10	L		
M	W	39	13	9.30	12.90	12.90	12.90	L		
M	H	28	13	12.90	8.40	9.60	9.10	L		
M	W	18	12	12.90	10.60	12.90	12.90	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	26	13	12.90	8.40	9.60	9.10	L		
M	W	22	12	8.50	12.90	12.90	12.90	L		
M	W	38	16	12.90	8.80	12.90	12.90	L		CADD
F	W	37	12	12.90	12.90	12.90	12.90	L		
M	W	32	13	12.90	12.90	12.90	12.90	L		ET/MT/AM
M	W	21	12	10.60	7.30	8.90	8.10	L		
M	A	26	13	6.50	9.10	8.90	9.00	L	11.40	
M	W	49	13	12.90	9.10	12.90	12.90	L		ET*
M	W	24	12	12.90	8.60	12.90	12.90	L		
M	W	25	12	8.40	9.60	9.10	12.90	L		
M	W	33	13	12.90	12.90	12.90	12.90	L		
F	W	24	12	12.90	7.20	8.90	8.00	L		
M	W	34	13	12.90	7.90	10.30	9.00	L		
M	W	18	12	7.80	7.90	8.00	8.00	L		
M	W	18	GED	12.90	12.90	12.90	12.90	L		
M	W	26	11	12.90	7.50	8.20	7.90	L		
M	W	37	14	12.90	8.80	8.90	8.90	L		CAD
M	W	24	12	12.90	10.60	12.90	12.90	L		
M	W	46	12	12.90	8.40	9.30	8.90	L		
M	W	34	12	12.90	6.00	11.50	7.90	L		
M	W	43	12	12.90	12.90	11.50	12.90	L		
M	W	53	GED	8.20	8.20	7.40	7.80	L		
M	W	26	16	12.90	8.40	12.90	12.90	L		
M	W	22	12	10.20	6.70	9.30	7.80	L		
M	W	33	13	12.90	12.90	12.90	12.90	L		
M	H	38	16	8.00	12.90	12.90	12.90	L		
F	AI	43	14	12.90	8.60	8.90	8.80	L		
M	W	22	GED	10.80	6.70	9.30	7.80	L		
M	W	30	12	12.90	8.80	11.50	9.90	L		
M	W	36	16	12.90	9.10	12.90	12.90	L		
M	W	27	12	12.90	8.60	12.90	10.40	L		
M	W	23	12	12.90	12.90	12.90	12.90	L		
M	W	54	15	12.90	9.10	12.90	10.90	L		
F	W	33	10	12.50	6.50	9.30	7.70	L		
M	W	20	13	10.60	9.10	12.90	10.90	L		CADD*
M	W	36	12	12.90	7.00	8.60	7.70	L		
M	W	38	16	12.90	11.00	11.50	11.10	L	12.90	
M	W	54	12	10.90	7.90	7.40	7.70	L		
M	W	27	12	10.60	9.30	12.90	11.40	L		
M	W	30	8	7.80	7.00	8.20	7.60	L		
M	W	37	13	12.90	12.90	12.90	12.00	L		
M	W	24	13	7.90	9.30	12.90	12.90	L		
M	W	21	11	8.90	9.30	12.90	12.20	L		
F	W	21	13	12.90	12.90	12.90	12.90	L		CADD
M	W	25	12	12.90	11.50	12.90	12.70	L		CADD*
M	W	55	16	12.90	12.90	12.90	12.90	L		
M	W	41	13	12.90	8.80	12.90	12.70	L		
M	W	27	13	12.90	9.30	12.90	12.90	L		
M	W	27	12	12.90	7.90	11.50	9.70	L		
M	W	40	12	12.90	12.90	12.90	12.90	L		
M	W	22	GED	12.90	8.40	12.90	12.90	L		
F	W	36	12	12.90	6.90	8.20	7.50	L		
M	W	33	13	12.90	10.60	12.90	12.90	L		
M	B	29	12	7.40	12.90	9.60	12.90	L		
F	W	25	12	11.70	9.30	9.30	9.30	L		
M	A	36	13	12.90	12.90	12.90	12.90	L		ET*
F	H	38	14	12.90	8.60	12.90	12.90	L		
M	W	41	15	7.30	10.90	12.90	12.90	L		ET*
M	W	31	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	18	12	12.90	9.10	12.90	12.90	L		ET*

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE		CERTS
M	W	26	16	12.90	7.90	11.50	9.20	L			ICT*
M	W	38	12	10.80	8.30	6.10	7.50	L			
M	W	47	14	12.90	12.90	12.90	12.90	L			
M	W	30	12	12.90	7.30	7.70	7.50	L		11.40	
M	W	42	12	12.90	9.10	9.30	9.20	L			ET/MT*
M	W	29	16	7.00	12.90	12.90	12.90	L			
M	W	30	12	7.40	8.60	9.60	9.10	L			
M	W	24	12	12.90	7.30	7.70	7.50	L			
M	W	30	12	12.90	7.70	11.50	9.10	L			
F	W	23	9	8.90	7.30	7.40	7.40	L			
F	W	39	12	12.50	7.90	10.30	9.00	L			
M	W	35	10	12.90	9.60	12.50	12.90	L			
M	W	38	14	12.90	9.10	12.90	12.90	L			
F	W	26	16	7.60	7.30	7.40	7.40	L			
F	W	41	12	12.90	11.50	8.00	8.90	L			
M	W	21	13	12.90	7.20	7.70	7.40	L		11.40	
M	W	45	12	12.90	8.20	9.60	8.90	L			
M	W	22	12	9.20	7.90	6.70	7.40	L			
M	W	41	12	8.90	10.10	8.70	8.80	L			
M	W	21	12	12.90	11.50	12.90	12.90	L			
M	W	26	12	12.90	8.80	11.50	9.90	L			
M	B	21	12	12.50	7.20	7.40	7.30	L			
M	W	19	11	12.90	7.90	12.90	10.60	L			
M	W	30	12	12.90	12.90	12.90	12.90	L			
M	W	20	12	12.90	11.50	10.30	10.90	L			
M	A	24	14	6.90	10.60	12.90	12.90	L			
F	W	21	12	12.90	12.90	9.60	11.40	L			
M	W	24	12	12.90	11.50	12.90	12.90	L			
M	W	31	8	12.90	8.60	12.90	12.60	L			
M	W	37	16	6.70	12.90	12.90	12.90	L			ET/MT
F	W	30	GED	8.60	8.60	10.90	9.70	L		10.40	
F	W	19	12	12.90	12.90	12.90	12.90	L			
M	W	28	13	12.10	8.80	10.30	9.50	L			
M	W	33	16	6.30	12.90	12.90	12.90	L			
M	W	20	12	9.30	5.10	5.30	5.10	L			
F	W	31	11	12.90	6.30	8.60	7.30	L			
M	W	37	14	12.90	10.60	12.90	12.90	L			
M	W	34	GED	11.20	6.00	8.90	7.30	L			
M	W	49	12	9.20	8.80	9.60	9.20	L			
M	W	20	11	12.90	7.00	7.70	7.30	L			
M	B	23	14	8.00	10.60	8.60	9.10	L			
M	W	24	13	12.90	6.50	8.20	7.20	L			
M	W	20	12	12.90	9.30	8.60	9.00	L			
M	W	37	13	12.90	12.90	12.90	12.90	L			
M	W	31	16	6.20	8.40	9.30	8.90	L			ET/MT*
M	W	26	12	6.60	7.70	6.10	7.10	L			
F	B	20	14	12.90	12.90	12.90	12.90	L			
F	W	41	12	12.90	9.10	12.90	12.90	L			
F	W	38	12	12.90	8.60	12.90	10.90	L			
M	W	28	12	12.90	6.50	8.00	7.10	L			
M	W	33	11	12.90	10.60	12.90	12.20	L			
M	W	30	12	12.90	6.50	8.00	7.10	L			
F	W	20	12	8.90	9.10	10.30	9.70	L			
F	W	34	11	9.40	6.70	7.40	7.00	L			
M	W	32	12	12.90	12.90	12.90	12.90	L			
M	W	34	12	12.90	9.30	12.90	12.90	L			
F	W	19	12	12.90	8.80	9.30	9.10	L			
F	W	32	GED	12.90	6.30	8.00	7.00	L		12.90	
M	W	43	12	12.90	7.90	10.30	9.00	L			
M	W	33	12	10.80	6.50	7.70	7.00	L			

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	A	30	16	10.00	8.60	12.90	10.40	L		
F	B	22	12	10.80	6.00	8.00	6.90	L		
F	W	37	12	12.90	8.80	12.90	12.70	L		
M	W	36	16	12.90	6.00	8.00	6.90	L		
M	W	38	10	12.90	7.90	11.50	9.20	L		
F	B	40	14	12.90	7.20	6.40	6.90	L		
M	W	20	12	12.90	12.90	12.90	12.90	L		
F	B	48	12	5.90	9.10	4.30	6.70	L		
F	W	20	12	12.90	12.90	12.90	12.90	L		
M	W	41	14	12.90	9.30	12.90	11.40	L		
M	W	34	GED	12.90	12.90	12.90	12.90	L		
M	W	27	GED	12.90	5.20	8.20	6.50	L		
M	W	30	12	11.40	4.90	7.70	5.80	L		9.20

APPENDIX 4
Math TABE Scores Summary

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	20	12	9.30	5.10	5.30	5.10	L		
M	B	32	14	6.20	5.50	5.30	5.40	L		
M	W	30	12	11.40	4.90	7.70	5.80	L		9.20
M	W	27	GED	12.90	5.20	8.20	6.50	L		
F	B	48	12	5.90	9.10	4.30	6.70	L		
F	B	40	14	12.90	7.20	6.40	6.90	L		
M	W	36	16	12.90	6.00	8.00	6.90	L		
F	B	22	12	10.80	6.00	8.00	6.90	L		
M	W	33	12	10.80	6.50	7.70	7.00	L		
F	W	32	GED	12.90	6.30	8.00	7.00	L		12.90
F	W	34	11	9.40	6.70	7.40	7.00	L		
M	W	30	12	12.90	6.50	8.00	7.10	L		
M	W	28	12	12.90	6.50	8.00	7.10	L		
M	W	26	12	6.60	7.70	6.10	7.10	L		
M	W	24	13	12.90	6.50	8.20	7.20	L		
M	W	20	11	12.90	7.00	7.70	7.30	L		
M	W	34	GED	11.20	6.00	8.90	7.30	L		
F	W	31	11	12.90	6.30	8.60	7.30	L		
M	B	21	12	12.50	7.20	7.40	7.30	L		
M	W	22	12	9.20	7.90	6.70	7.40	L		
M	W	21	13	12.90	7.20	7.70	7.40	L		11.40
F	W	26	16	7.60	7.30	7.40	7.40	L		
F	W	23	9	8.90	7.30	7.40	7.40	L		
M	W	24	12	12.90	7.30	7.70	7.50	L		
M	W	30	12	12.90	7.30	7.70	7.50	L		11.40
M	W	38	12	10.80	8.80	6.10	7.50	L		
F	W	36	12	12.90	6.90	8.20	7.50	L		
M	W	30	8	7.80	7.00	8.20	7.60	L		
M	W	54	12	10.90	7.90	7.40	7.70	L		
M	W	36	12	12.90	7.00	8.60	7.70	L		
F	W	33	10	12.50	6.50	9.30	7.70	L		
M	W	22	GED	10.80	6.70	9.30	7.80	L		
M	W	22	12	10.20	6.70	9.30	7.80	L		
M	W	53	GED	8.20	8.20	7.40	7.80	L		
M	W	34	12	12.90	6.00	11.50	7.90	L		
M	W	26	11	12.90	7.50	8.20	7.90	L		
M	W	18	12	7.80	7.90	8.00	8.00	L		
F	W	24	12	12.90	7.20	8.90	8.00	L		
M	W	21	12	10.60	7.30	8.90	8.10	L		
M	W	33	11	12.90	6.50	11.50	8.10	L		
M	W	33	12	12.90	7.00	9.30	8.10	L		
F	W	30	GED	11.70	7.30	8.90	8.10	L		
M	W	20	12	12.50	8.20	8.20	8.20	L		
M	A	39	13	4.70	7.50	8.90	8.20	L		
M	A	38	16	4.20	7.70	8.60	8.20	L		
M	W	39	GED	8.50	7.90	8.60	8.30	L		
M	W	23	12	10.20	7.50	9.30	8.40	L		
F	W	23	13	12.90	8.60	8.20	8.40	L		
M	W	21	12	8.10	8.20	8.60	8.40	L		
M	B	31	13	7.80	8.60	8.20	8.40	L		
M	W	53	GED	12.90	7.20	10.30	8.50	L		
M	W	46	GED	10.60	7.70	9.30	8.50	L		
F	W	45	12	9.60	8.40	8.60	8.50	L		
M	W	27	GED	12.90	7.30	10.30	8.60	L		
F	W	40	11	12.90	8.20	8.90	8.60	L		
M	W	34	12	12.50	8.60	8.60	8.60	L		
M	B	38	13	12.90	6.90	12.90	8.60	L		
M	W	34	14	4.70	8.40	8.90	8.60	L		
M	A	29	GED	6.20	7.00	12.90	8.70	L		
M	W	41	12	11.10	8.20	9.30	8.70	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
F	W	27	11	12.90	8.80	8.90	8.80	L		
F	AI	43	14	12.90	8.60	8.90	8.80	L		
M	W	41	12	8.90	10.10	8.70	8.80	L		
M	W	45	12	12.90	8.20	9.60	8.90	L		
M	W	46	12	12.90	8.40	9.30	8.90	L		
M	W	31	16	6.20	8.40	9.30	8.90	L		ET/MT*
M	W	37	14	12.90	8.80	8.90	8.90	L		CAD
F	W	41	12	12.90	11.50	8.00	8.90	L		
M	W	43	12	12.90	7.90	10.30	9.00	L		
M	W	34	13	12.90	7.90	10.30	9.00	L		
M	W	20	12	12.90	9.30	8.60	9.00	L		
F	W	39	12	12.50	7.90	10.30	9.00	L		
M	A	26	13	6.50	9.10	8.90	9.00	L	11.40	
M	W	30	12	12.90	7.70	11.50	9.10	L		
M	B	23	14	8.00	10.60	8.60	9.10	L		
M	W	26	13	12.90	8.40	9.60	9.10	L		
M	W	30	12	7.40	8.60	9.60	9.10	L		
M	H	28	13	12.90	8.40	9.60	9.10	L		
F	W	19	12	12.90	8.80	9.30	9.10	L		
M	W	47	12	12.90	8.40	9.60	9.10	L		
M	W	42	12	12.90	9.10	9.30	9.20	L		ET/MT*
M	W	49	12	9.20	8.80	9.60	9.20	L		
M	W	38	10	12.90	7.90	11.50	9.20	L		
M	W	26	16	12.90	7.90	11.50	9.20	L		ICT*
M	A	34	GED	6.10	9.10	9.30	9.20	L		
M	W	31	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	42	13	10.80	7.70	12.90	9.30	L		
M	W	46	GED	12.90	7.70	12.90	9.30	L	12.90	
F	W	25	12	11.70	9.30	9.30	9.30	L		
M	W	28	12	10.90	8.60	10.30	9.40	L		
M	W	25	11	10.40	8.60	10.30	9.40	L		
M	W	28	13	12.10	8.80	10.30	9.50	L		
M	W	28	14	12.90	9.30	9.60	9.50	L		
M	W	28	12	10.60	10.60	9.30	9.50	L		
F	W	20	12	8.90	9.10	10.30	9.70	L		
M	W	27	12	12.90	7.90	11.50	9.70	L		
M	W	34	15	12.90	8.60	11.50	9.70	L	12.90	
F	W	30	GED	8.60	8.60	10.90	9.70	L	10.40	
M	W	38	16	7.10	7.60	10.90	9.70	L		
M	W	36	14	12.90	8.40	12.90	9.90	L		
M	W	26	12	12.90	8.80	11.50	9.90	L		
M	W	40	16	12.90	10.60	9.60	9.90	L		
M	W	30	12	12.90	8.80	11.50	9.90	L		
M	W	28	12	9.80	8.40	12.90	9.90	L		
M	A	30	16	10.00	8.60	12.90	10.40	L		
M	W	25	16	12.90	6.90	12.90	10.40	L		
M	W	27	12	12.90	8.60	12.90	10.40	L		
F	W	18	11	10.00	10.60	10.30	10.60	L		
M	W	19	11	12.90	7.90	12.90	10.60	L		
M	W	27	12	12.90	7.90	10.60	10.60	L		
M	W	54	15	12.90	9.10	12.90	10.90	L		
M	W	45	13	12.90	8.60	12.90	10.90	L		
F	W	38	12	12.90	8.60	12.90	10.90	L		
F	W	45	GED	12.90	11.50	10.30	10.90	L		
M	W	20	13	10.60	9.10	12.90	10.90	L		CADD*
M	A	31	16	7.90	11.50	10.30	10.90	L		
M	W	20	12	12.90	11.50	10.30	10.90	L		
F	W	42	14	12.90	9.10	12.90	10.90	L		
M	W	38	16	12.90	11.00	11.50	11.10	L	12.90	
M	W	52	16	12.90	10.60	11.50	11.10	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB MATH/RE	CERTS
M	W	41	14	12.90	9.30	12.90	11.40	L	
M	W	20	13	12.90	9.30	12.90	11.40	L	
M	W	27	12	10.60	9.30	12.90	11.40	L	
F	W	32	16	12.90	9.30	12.90	11.40	L	
F	W	21	12	12.90	12.90	9.60	11.40	L	
M	W	18	12	12.90	9.10	12.90	11.70	L	
M	W	37	13	12.90	12.90	12.90	12.00	L	
F	W	46	12	12.90	8.60	12.90	12.20	L	
M	W	33	11	12.90	10.60	12.90	12.20	L	
M	W	54	GED	10.60	12.90	8.90	12.20	L	
M	W	21	11	8.90	9.30	12.90	12.20	L	
F	AI	38	16	12.90	10.60	12.90	12.20	L	
M	W	31	8	12.90	8.60	12.90	12.60	L	
M	W	21	12	12.90	8.80	12.90	12.70	L	
M	W	25	12	12.90	11.50	12.90	12.70	L	CADD*
M	W	20	12	12.10	11.50	12.90	12.70	L	
F	W	37	12	12.90	8.80	12.90	12.70	L	
M	W	41	GED	12.90	8.80	12.90	12.70	L	ET*
M	W	41	13	12.90	8.80	12.90	12.70	L	
M	W	33	12	12.90	12.90	12.90	12.90		
M	W	18	11	12.90	12.90	12.90	12.90		
M	W	29	15	12.90	12.90	12.90	12.90		
M	W	33	13	12.90	12.90	12.90	12.90		
M	W	27	12	12.90	10.60	12.90	12.90	L	
M	W	36	12	12.90	12.90	12.90	12.90		
F	W	46	GED	12.90	12.90	12.90	12.90		
M	W	22	GED	12.90	8.40	12.90	12.90	L	
M	W	19	11	12.90	12.90	12.90	12.90		
F	W	44	14	12.90	12.90	12.90	12.90		
F	W	19	GED	12.90	12.90	12.90	12.90		
M	W	33	13	12.90	10.60	12.90	12.90	L	
M	W	20	12	12.90	12.90	12.90	12.90		
F	W	20	12	12.90	12.90	12.90	12.90	L	
F	W	31	15	12.90	12.90	12.90	12.90	L	CADD*
M	W	50	14	12.90	12.90	12.90	12.90		MT
M	W	36	13	12.90	12.90	12.90	12.90		
M	W	21	13	12.90	12.90	12.90	12.90		
M	W	28	GED	12.90	12.90	12.90	12.90	L	
F	W	38	14	12.90	8.60	12.90	12.90	L	
M	W	22	11	12.90	12.90	12.90	12.90		
M	W	32	12	12.90	12.90	12.90	12.90	L	
M	W	32	GED	12.90	9.30	12.90	12.90	L	
M	W	21	14	12.90	12.90	12.90	12.90		
M	W	39	12	12.90	12.90	12.90	12.90		
M	W	37	14	12.90	10.60	12.90	12.90	L	
M	W	44	16	12.90	12.90	12.90	12.90	L	
M	W	38	14	12.90	12.90	12.90	12.90		ET/MT*
M	W	29	12	12.90	8.20	12.90	12.90	L	
F	W	38	14	12.90	12.90	12.90	12.90		CADD*
M	W	64	16	12.90	11.50	12.90	12.90	L	
M	W	47	14	12.90	12.90	12.90	12.90	L	
M	W	44	9	12.90	12.90	12.90	12.90	L	
M	W	32	12	12.90	12.90	12.90	12.90		
M	W	36	GED	12.90	10.60	12.90	12.90	L	
M	W	34	14	12.90	12.90	12.90	12.90		ICT
M	W	31	12	12.90	12.90	12.90	12.90		
M	W	24	14	12.90	12.90	12.90	12.90		
M	W	32	13	12.90	12.90	12.90	12.90		ET*
M	W	22	14	12.90	12.90	12.90	12.90		
M	W	21	12	12.90	12.90	12.90	12.90		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
F	W	38	13	12.90	12.90	12.90	12.90			
M	W	38	16	12.90	8.80	12.90	12.90	L		CADD
M	W	29	GED	12.90	12.90	12.90	12.90			
M	W	32	13	12.90	12.90	12.90	12.90	L		ET/MT/AM
M	W	34	GED	12.90	12.90	12.90	12.90	L		
F	W	20	GED	12.90	12.90	12.90	12.90			
M	W	38	13	12.90	12.90	12.90	12.90			
M	W	24	12	12.90	8.60	12.90	12.90	L		
M	W	35	14	12.90	12.90	12.90	12.90			
M	W	33	13	12.90	12.90	12.90	12.90	L		
M	W	38	14	12.90	9.10	12.90	12.90	L		
M	W	34	13	12.90	12.90	12.90	12.90			
M	W	27	14	12.90	12.90	12.90	12.90			
M	W	18	GED	12.90	12.90	12.90	12.90	L		
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	17	10	12.90	12.90	12.90	12.90			
M	W	62	14	12.90	12.90	12.90	12.90			
F	W	47	12	12.90	12.90	12.90	12.90			
F	B	30	14	12.90	12.90	12.90	12.90			
M	W	43	12	12.90	12.90	11.50	12.90	L		
M	W	20	12	12.90	12.90	12.90	12.90	L		
M	W	26	16	12.90	8.40	12.90	12.90	L		
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	33	13	12.90	12.90	12.90	12.90	L		
F	B	20	14	12.90	12.90	12.90	12.90	L		
M	W	39	12	12.90	12.90	12.90	12.90			
M	W	22	14	12.90	12.90	12.90	12.90			
M	W	48	12	12.90	12.90	12.90	12.90			
M	W	35	13	12.90	12.90	12.90	12.90			
F	W	42	16	12.90	12.90	12.90	12.90			
M	W	32	14	12.90	12.90	12.90	12.90			
M	W	37	10	12.90	11.50	12.90	12.90	L		
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	38	16	12.90	12.90	12.90	12.90			ET/MT*
M	W	38	14	12.90	12.90	12.90	12.90			CNC
M	W	40	12	12.90	9.10	12.90	12.90	L		
M	W	23	14	12.90	12.90	12.90	12.90			CADD
M	W	28	GED	12.90	12.90	12.90	12.90	L		
M	W	31	12	12.90	12.90	12.90	12.90			
F	W	23	12	12.90	12.90	12.90	12.90			ET
M	W	34	15	12.90	12.90	12.90	12.90			
M	W	53	12	12.90	12.90	12.90	12.90			
M	W	40	15	12.90	12.90	12.90	12.90			ET
M	W	35	13	12.90	12.90	12.90	12.90	L		
M	W	33	15	12.90	12.90	12.90	12.90			
M	AI	39	16	12.90	12.90	12.90	12.90	L		
M	W	46	12	12.90	12.90	12.90	12.90			
M	W	22	13	12.90	9.10	12.90	12.90	L		
M	W	36	12	12.90	12.90	12.90	12.90	L		
M	W	37	16	12.90	12.90	12.90	12.90			
M	B	33	12	12.90	12.90	12.90	12.90			
M	W	45	16	12.01	12.90	12.90	12.90	L		
M	B	48	13	12.90	12.90	12.90	12.90			
M	W	32	GED	12.90	12.90	12.90	12.90			
M	W	64	12	12.90	12.90	12.90	12.90			
M	W	32	15	12.00	12.90	12.90	12.90	L		
M	W	33	12	12.90	12.90	12.90	12.90	L		
M	W	30	12	11.20	12.90	12.90	12.90	L		
M	W	19	12	12.90	12.90	12.90	12.90	L		
F	W	28	12	12.90	7.50	9.60	12.90	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	37	12	12.90	12.90	12.90	12.90			
M	A	34	14	10.00	12.90	12.90	12.90	L		
M	W	36	13	12.90	12.90	12.90	12.90	L		
M	W	27	12	12.90	9.10	12.90	12.90	L		
M	W	34	12	12.90	12.90	12.90	12.90	L		
M	W	39	13	9.30	12.90	12.90	12.90	L		
M	W	18	12	12.90	10.60	12.90	12.90	L		
M	W	22	12	8.50	12.90	12.90	12.90	L		
F	W	37	12	12.90	12.90	12.90	12.90	L		
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	49	13	12.90	9.10	12.90	12.90	L		ET*
M	W	25	12	8.40	9.60	9.10	12.90	L		
M	W	37	13	12.90	12.90	12.90	12.90			
M	W	54	16	12.90	12.90	12.90	12.90			
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	24	12	12.90	10.60	12.90	12.90	L		
M	W	43	12	12.90	12.90	12.90	12.90			
M	W	42	16	12.90	12.90	12.90	12.90			ET/MT
M	W	34	GED	12.90	12.90	12.90	12.90			ET*
M	H	38	16	8.00	12.90	12.90	12.90	L		
M	W	20	12	12.90	12.90	12.90	12.90			
M	W	36	16	12.90	9.10	12.90	12.90	L		
M	W	23	12	12.90	12.90	12.90	12.90	L		
F	W	28	12	12.90	12.90	12.90	12.90			
M	W	29	12	12.90	12.90	12.90	12.90			
F	W	47	16	12.90	12.90	12.90	12.90			
M	W	23	12	12.90	12.90	12.90	12.90			
M	W	24	13	7.90	9.30	12.90	12.90	L		
F	W	21	13	12.90	12.90	12.90	12.90	L		CADD
M	W	55	16	12.90	12.90	12.90	12.90	L		
M	W	27	13	12.90	9.30	12.90	12.90	L		
M	W	40	12	12.90	12.90	12.90	12.90	L		
M	W	19	12	12.90	12.90	12.90	12.90			ET*
M	B	29	12	7.40	12.90	9.60	12.90	L		
M	A	36	13	12.90	12.90	12.90	12.90	L		ET*
M	W	41	15	7.30	10.90	12.90	12.90	L		ET*
M	W	18	12	12.90	9.10	12.90	12.90	L		ET*
M	W	56	16	12.90	12.90	12.90	12.90			
M	W	34	12	12.90	12.90	12.90	12.90			
M	W	29	16	7.00	12.90	12.90	12.90	L		
M	W	26	12	12.90	12.90	12.90	12.90			
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	35	10	12.90	9.60	12.50	12.90	L		
M	W	19	13	12.90	12.90	12.90	12.90			
M	W	51	12	12.90	12.90	12.90	12.90			
M	W	23	GED	12.90	12.90	12.90	12.90			CADD/CAM
M	W	21	12	12.90	11.50	12.90	12.90	L		
F	W	30	12	12.90	12.90	12.90	12.90			
M	W	30	12	12.90	12.90	12.90	12.90	L		
M	A	24	14	6.90	10.60	12.90	12.90	L		
M	W	24	12	12.90	11.50	12.90	12.90	L		
M	W	37	16	6.70	12.90	12.90	12.90	L		ET/MT
F	W	19	12	12.90	12.90	12.90	12.90	L		
M	W	33	16	6.30	12.90	12.90	12.90	L		
M	W	31	13	12.90	12.90	12.90	12.90			
M	W	37	10	12.90	12.90	12.90	12.90			
F	W	34	12	12.90	12.90	12.90	12.90			
F	W	24	16	12.90	12.90	12.90	12.90			
M	W	37	13	12.90	12.90	12.90	12.90	L		
M	W	26	12	12.90	12.90	12.90	12.90			

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	.LAB	MATH/RE	CERTS
F	W	41	12	12.90	9.10	12.90	12.90	L		
M	W	35	16	12.90	12.90	12.90	12.90			
F	W	20	13	12.90	12.90	12.90	12.90			
M	W	23	12	12.90	12.90	12.90	12.90			
M	W	34	12	12.90	9.30	12.90	12.90	L		
M	W	40	12	12.90	12.90	12.90	12.90			
F	W	26	12	12.90	12.90	12.90	12.90			
M	W	34	13	12.90	12.90	12.90	12.90			
F	W	36	12	12.90	12.90	12.90	12.90			
M	W	29	12	12.90	12.90	12.90	12.90			ET/MT*
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	44	17	12.90	12.90	12.90	12.90			
M	W	61	17	12.90	12.90	12.90	12.90			

APPENDIX 5
Program Level Learning Lab Assignment Scheme
and
Post Program Level Learning Lab Assignment Scheme

TO: Jim McGuinness

FROM: Bob Landers BL

DATE: April 4, 1989

SUBJECT: TABE test designations for class placement

After reviewing future TABE test reports, I will mark each report with one of the following:

MARK	SUGGESTED MATH PROGRAM
1	Assign directly to TECH MATH I
2	Assign to LEARNING LAB for review test and possible short brush-up
3	Set-up for 7.5 hours per week of LEARNING LAB
4	Set-up for 15 hours per week of LEARNING LAB
5	Assign to LEARNING LAB only (FULL TIME)

M E M O

TO: Jim McGuinness

FROM: Bob Landers & Alex Millar RJL ab

DATE: April 30, 1990

SUBJECT: Post Project Learning Lab for High Tech

After the High Tech Learning Lab has been moved to the main building, we would suggest the following procedure for remediation of incoming High Tech students.

1. Anyone scoring above 8.0 Total Grade Equivalent in the Reading and 12.9 Total Grade Equivalent in the Math should report directly to the Tech Math course. The Tech Math Instructor should review their TABE report for Math areas that need review before beginning the Tech Math curriculum.

2. Anyone scoring above 8.0 Total Grade Equivalent in the Reading and between 10.0 & 12.9 Total Grade Equivalent in the Math should be assigned to the Learning Lab for one period a day. Their remedial math work would depend on their individual needs as indicated by their TABE report.

3. Anyone scoring above 8.0 Total Grade Equivalent in the Reading, and between 8.0 & 10.0 Total Grade Equivalent in the Math should be assigned to the Learning Lab for two periods per day for a complete review of Basic Math.

4. Anyone scoring below 8.0 Total Grade Equivalent on the Math and/or Reading parts of the TABE test should be assigned exclusively to the Learning Lab for Math and/or Reading remediation, before being admitted to the High Tech Center.

cc: Amy Henderson
Karren Napier
Carol Hall
Maxine Factory

APPENDIX 6
Recap of Internship Program

RECAP by COMPANY

CLIENT	#	MAJOR
Air Refiner	3	CAD
Cain's Coffee	3	Auto. Mfg./Robotics
Clymer	2	CAD
DP Enterprises	1	Microprocessor
Gulfstream	1	CNC
Gulfstream	2	Electronics
O.G. & E.	3	Instr. & Control
Omniplex	2	Microprocessor
Omniplex	3	CAD
9	20	

RECAP by MAJOR

#	MAJOR	%
8	CAD	40
3	Auto. Mfg./Robotics	15
3	Microprocessor	15
2	Electronics	10
3	Instr. & Control	15
1	CNC	5
20		100%

APPENDIX 7
Program Placement Summary

HTPP PLACEMENT SUMMARY

DEFINITION

The definition of a "Completer" used by Francis Tuttle Vo-Tech Center in statistical reporting to the Oklahoma State Department of Vocational Technical Training is a student who either:

1) completed sufficient training which has resulted in the student securing employment in a technical position

2) received a certificate of course completion

For this report, the above definition has been applied only those students who enrolled after the beginning of the Project, January 1, 1989.

STATISTICS

COMPLETERS

	COMPLETERS	% OF TOTAL COMPLETERS	# PLACED	% PLACED
MICRO	21	55.26	18	86
CAD	6	15.79	6	100
INSTR	4	10.53	4	100
AUTO/MFG	5	13.16	5	100
CNC	2	5.26	2	100
	38		35	

TOTAL PLACEMENT 35/38 = 92%

APPENDIX 8a
Recruitment Information by Age

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	17	10	12.90	12.90	12.90	12.90			
M	W	18	12	7.80	7.90	8.00	8.00	L		
F	W	18	11	10.00	10.60	10.30	10.60	L		
M	W	18	12	12.90	10.60	12.90	12.90	L		
M	W	18	12	12.90	9.10	12.90	11.70	L		
M	W	18	11	12.90	12.90	12.90	12.90			
M	W	18	12	12.90	9.10	12.90	12.90	L		ET*
M	W	18	GED	12.90	12.90	12.90	12.90	L		
M	W	19	12	12.90	12.90	12.90	12.90	L		
M	W	19	11	12.90	12.90	12.90	12.90			
F	W	19	12	12.90	8.80	9.30	9.10	L		
M	W	19	13	12.90	12.90	12.90	12.90			
M	W	19	11	12.90	7.90	12.90	10.60	L		
M	W	19	12	12.90	12.90	12.90	12.90			ET*
F	W	19	12	12.90	12.90	12.90	12.90	L		
F	W	19	GED	12.90	12.90	12.90	12.90			
F	W	20	12	8.90	9.10	10.30	9.70	L		
M	W	20	12	12.10	11.50	12.90	12.70	L		
F	W	20	12	12.90	12.90	12.90	12.90	L		
M	W	20	12	12.90	11.50	10.30	10.90	L		
M	W	20	12	12.90	12.90	12.90	12.90	L		
F	W	20	GED	12.90	12.90	12.90	12.90			
F	B	20	14	12.90	12.90	12.90	12.90	L		
M	W	20	12	12.90	12.90	12.90	12.90			
M	W	20	13	12.90	9.30	12.90	11.40	L		
M	W	20	13	10.60	9.10	12.90	10.90	L		CADD*
M	W	20	12	9.30	5.10	5.30	5.10	L		
M	W	20	12	12.50	8.20	8.20	8.20	L		
M	W	20	12	12.90	12.90	12.90	12.90			
M	W	20	12	12.90	9.30	8.60	9.00	L		
M	W	20	11	12.90	7.00	7.70	7.30	L		
F	W	20	13	12.90	12.90	12.90	12.90			
F	W	21	13	12.90	12.90	12.90	12.90	L		CADD
F	W	21	12	12.90	12.90	9.60	11.40	L		
M	W	21	11	8.90	9.30	12.90	12.20	L		
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	21	12	10.60	7.30	8.90	8.10	L		
M	W	21	13	12.90	7.20	7.70	7.40	L	11.40	
M	W	21	12	12.90	8.80	12.90	12.70	L		
M	B	21	12	12.50	7.20	7.40	7.30	L		
M	W	21	12	8.10	8.20	8.60	8.40	L		
M	W	21	13	12.90	12.90	12.90	12.90			
M	W	21	12	12.90	12.90	12.90	12.90			
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	21	12	12.90	11.50	12.90	12.90	L		
M	W	22	GED	10.80	6.70	9.30	7.80	L		
F	B	22	12	10.80	6.00	8.00	6.90	L		
M	W	22	14	12.90	12.90	12.90	12.90			
M	W	22	GED	12.90	8.40	12.90	12.90	L		
M	W	22	12	8.50	12.90	12.90	12.90	L		
M	W	22	11	12.90	12.90	12.90	12.90			
M	W	22	12	9.20	7.90	6.70	7.40	L		
M	W	22	14	12.90	12.90	12.90	12.90			
M	W	22	12	10.20	6.70	9.30	7.80	L		
M	W	22	13	12.90	9.10	12.90	12.90	L		
M	W	23	12	12.90	12.90	12.90	12.90			
F	W	23	13	12.90	8.60	8.20	8.40	L		
M	W	23	12	12.90	12.90	12.90	12.90			
F	W	23	9	8.90	7.30	7.40	7.40	L		
M	W	23	GED	12.90	12.90	12.90	12.90			CADD/CAM

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	B	23	14	8.00	10.60	8.60	9.10	L		
M	W	23	14	12.90	12.90	12.90	12.90			CADD
M	W	23	12	10.20	7.50	9.30	8.40	L		
M	W	23	12	12.90	12.90	12.90	12.90	L		
F	W	23	12	12.90	12.90	12.90	12.90			ET
M	W	24	14	12.90	12.90	12.90	12.90			
M	W	24	13	12.90	6.50	8.20	7.20	L		
M	A	24	14	6.90	10.60	12.90	12.90	L		
M	W	24	12	12.90	11.50	12.90	12.90	L		
M	W	24	12	12.90	8.60	12.90	12.90	L		
M	W	24	12	12.90	7.30	7.70	7.50	L		
F	W	24	16	12.90	12.90	12.90	12.90			
M	W	24	13	7.90	9.30	12.90	12.90	L		
M	W	24	12	12.90	10.60	12.90	12.90	L		
F	W	24	12	12.90	7.20	8.90	8.00	L		
M	W	25	12	8.40	9.60	9.10	12.90	L		
M	W	25	11	10.40	8.60	10.30	9.40	L		
M	W	25	16	12.90	6.90	12.90	10.40	L		
M	W	25	12	12.90	11.50	12.90	12.70	L		CADD*
F	W	25	12	11.70	9.30	9.30	9.30	L		
M	W	26	11	12.90	7.50	8.20	7.90	L		
M	W	26	16	12.90	7.90	11.50	9.20	L		ICT*
M	W	26	12	6.60	7.70	6.10	7.10	L		
F	W	26	16	7.60	7.30	7.40	7.40	L		
M	W	26	13	12.90	8.40	9.60	9.10	L		
F	W	26	12	12.90	12.90	12.90	12.90			
M	W	26	12	12.90	12.90	12.90	12.90			
M	W	26	12	12.90	12.90	12.90	12.90			
M	W	26	12	12.90	8.80	11.50	9.90	L		
M	W	26	16	12.90	8.40	12.90	12.90	L		
M	A	26	13	6.50	9.10	8.90	9.00	L	11.40	
M	W	27	12	12.90	8.60	12.90	10.40	L		
F	W	27	11	12.90	8.80	8.90	8.80	L		
M	W	27	GED	12.90	7.30	10.30	8.60	L		
M	W	27	12	12.90	9.10	12.90	12.90	L		
M	W	27	12	12.90	7.90	11.50	9.70	L		
M	W	27	12	12.90	7.90	10.60	10.60	L		
M	W	27	12	10.60	9.30	12.90	11.40	L		
M	W	27	14	12.90	12.90	12.90	12.90			
M	W	27	GED	12.90	5.20	8.20	6.50	L		
M	W	27	12	12.90	10.60	12.90	12.90	L		
M	W	27	13	12.90	9.30	12.90	12.90	L		
M	W	28	14	12.90	9.30	9.60	9.50	L		
M	W	28	13	12.10	8.80	10.30	9.50	L		
M	H	28	13	12.90	8.40	9.60	9.10	L		
M	W	28	GED	12.90	12.90	12.90	12.90	L		
F	W	28	12	12.90	7.50	9.60	12.90	L		
M	W	28	12	9.80	8.40	12.90	9.90	L		
M	W	28	12	10.60	10.60	9.30	9.50	L		
M	W	28	12	10.90	8.60	10.30	9.40	L		
M	W	28	12	12.90	6.50	8.00	7.10	L		
F	W	28	12	12.90	12.90	12.90	12.90			
M	W	28	GED	12.90	12.90	12.90	12.90	L		
M	W	29	12	12.90	12.90	12.90	12.90			
M	W	29	12	12.90	8.20	12.90	12.90	L		
M	W	29	15	12.90	12.90	12.90	12.90			
M	W	29	GED	12.90	12.90	12.90	12.90			
M	W	29	12	12.90	12.90	12.90	12.90			ET/MT*
M	A	29	GED	6.20	7.00	12.90	8.70	L		
M	B	29	12	7.40	12.90	9.60	12.90	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	29	16	7.00	12.90	12.90	12.90	L		
M	W	30	12	12.90	12.90	12.90	12.90	L		
M	W	30	12	7.40	8.60	9.60	9.10	L		
M	W	30	12	12.90	8.80	11.50	9.90	L		
F	W	30	12	12.90	12.90	12.90	12.90			
M	W	30	12	12.90	6.50	8.00	7.10	L		
M	W	30	12	12.90	7.30	7.70	7.50	L	11.40	
F	W	30	GED	8.60	8.60	10.90	9.70	L	10.40	
M	W	30	12	11.20	12.90	12.90	12.90	L		
M	W	30	8	7.80	7.00	8.20	7.60	L		
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	30	12	12.90	7.70	11.50	9.10	L		
M	A	30	16	10.00	8.60	12.90	10.40	L		
F	W	30	GED	11.70	7.30	8.90	8.10	L		
F	B	30	14	12.90	12.90	12.90	12.90			
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	30	12	11.40	4.90	7.70	5.80	L	9.20	
M	W	31	8	12.90	8.60	12.90	12.60	L		
M	W	31	12	12.90	12.90	12.90	12.90			
M	W	31	13	12.90	12.90	12.90	12.90			
M	A	31	16	7.90	11.50	10.30	10.90	L		
M	W	31	16	6.20	8.40	9.30	8.90	L		ET/MT*
F	W	31	11	12.90	6.30	8.60	7.30	L		
F	W	31	15	12.90	12.90	12.90	12.90	L		CADD*
M	B	31	13	7.80	8.60	8.20	8.40	L		
M	W	31	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	31	12	12.90	12.90	12.90	12.90			
M	W	32	13	12.90	12.90	12.90	12.90			ET*
M	W	32	GED	12.90	9.30	12.90	12.90	L		
M	W	32	14	12.90	12.90	12.90	12.90			
F	W	32	16	12.90	9.30	12.90	11.40	L		
M	W	32	12	12.90	12.90	12.90	12.90			
M	W	32	15	12.00	12.90	12.90	12.90	L		
M	W	32	12	12.90	12.90	12.90	12.90	L		
M	W	32	GED	12.90	12.90	12.90	12.90			
M	B	32	14	6.20	5.50	5.30	5.40	L		
M	W	32	13	12.90	12.90	12.90	12.90	L		ET/MT/AM
F	W	32	GED	12.90	6.30	8.00	7.00	L	12.90	
M	B	33	12	12.90	12.90	12.90	12.90			
M	W	33	12	10.80	6.50	7.70	7.00	L		
M	W	33	15	12.90	12.90	12.90	12.90			
M	W	33	11	12.90	6.50	11.50	8.10	L		
M	W	33	13	12.90	10.60	12.90	12.90	L		
M	W	33	11	12.90	10.60	12.90	12.20	L		
M	W	33	12	12.90	7.00	9.30	8.10	L		
F	W	33	10	12.50	6.50	9.30	7.70	L		
M	W	33	13	12.90	12.90	12.90	12.90	L		
M	W	33	13	12.90	12.90	12.90	12.90	L		
M	W	33	13	12.90	12.90	12.90	12.90			
M	W	33	12	12.90	12.90	12.90	12.90			
M	W	33	12	12.90	12.90	12.90	12.90	L		
M	W	33	16	6.30	12.90	12.90	12.90	L		
M	W	34	14	12.90	12.90	12.90	12.90			ICT
M	W	34	15	12.90	12.90	12.90	12.90			
M	A	34	GED	6.10	9.10	9.30	9.20	L		
M	W	34	12	12.90	9.30	12.90	12.90	L		
M	W	34	12	12.90	6.00	11.50	7.90	L		
M	W	34	12	12.90	12.90	12.90	12.90			
M	W	34	12	12.90	12.90	12.90	12.90	L		
F	W	34	12	12.90	12.90	12.90	12.90			

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	34	GED	11.20	6.00	8.90	7.30	L		
M	W	34	13	12.90	12.90	12.90	12.90			
M	W	34	12	12.50	8.60	8.60	8.60	L		
F	W	34	11	9.40	6.70	7.40	7.00	L		
M	W	34	14	4.70	8.40	8.90	8.60	L		
M	W	34	GED	12.90	12.90	12.90	12.90	L		
M	W	34	13	12.90	7.90	10.30	9.00	L		
M	W	34	GED	12.90	12.90	12.90	12.90			ET*
M	W	34	15	12.90	8.60	11.50	9.70	L	12.90	
M	W	34	13	12.90	12.90	12.90	12.90			
M	A	34	14	10.00	12.90	12.90	12.90	L		
M	W	35	10	12.90	9.60	12.50	12.90	L		
M	W	35	14	12.90	12.90	12.90	12.90			
M	W	35	16	12.90	12.90	12.90	12.90			
M	W	35	13	12.90	12.90	12.90	12.90			
M	W	35	13	12.90	12.90	12.90	12.90	L		
M	W	36	GED	12.90	10.60	12.90	12.90	L		
M	W	36	16	12.90	9.10	12.90	12.90	L		
M	W	36	14	12.90	8.40	12.90	9.90	L		
F	W	36	12	12.90	12.90	12.90	12.90			
M	W	36	12	12.90	7.00	8.60	7.70	L		
M	W	36	12	12.90	12.90	12.90	12.90	L		
M	W	36	16	12.90	6.00	8.00	6.90	L		
M	W	36	13	12.90	12.90	12.90	12.90	L		
M	W	36	13	12.90	12.90	12.90	12.90			
M	W	36	12	12.90	12.90	12.90	12.90			
F	W	36	12	12.90	6.90	8.20	7.50	L		
M	A	36	13	12.90	12.90	12.90	12.90	L		ET*
M	W	37	13	12.90	12.90	12.90	12.00	L		
M	W	37	12	12.90	12.90	12.90	12.90			
M	W	37	13	12.90	12.90	12.90	12.90			
M	W	37	13	12.90	12.90	12.90	12.90	L		
F	W	37	12	12.90	12.90	12.90	12.90	L		
M	W	37	14	12.90	10.60	12.90	12.90	L		
M	W	37	14	12.90	8.80	8.90	8.90	L		CAD
M	W	37	10	12.90	12.90	12.90	12.90			
M	W	37	10	12.90	11.50	12.90	12.90	L		
F	W	37	12	12.90	8.80	12.90	12.70	L		
M	W	37	16	12.90	12.90	12.90	12.90			
M	W	37	16	6.70	12.90	12.90	12.90	L		ET/MT
M	W	38	16	12.90	12.90	12.90	12.90			ET/MT*
F	W	38	12	12.90	8.60	12.90	10.90	L		
M	W	38	16	12.90	11.00	11.50	11.10	L	12.90	
F	W	38	13	12.90	12.90	12.90	12.90			
M	W	38	14	12.90	12.90	12.90	12.90			ET/MT*
M	W	38	14	12.90	9.10	12.90	12.90	L		
F	AI	38	16	12.90	10.60	12.90	12.20	L		
M	B	38	13	12.90	6.90	12.90	8.60	L		
M	W	38	16	12.90	8.80	12.90	12.90	L		CADD
M	W	38	13	12.90	12.90	12.90	12.90			
M	H	38	16	8.00	12.90	12.90	12.90	L		
F	W	38	14	12.90	12.90	12.90	12.90			CADD*
M	A	38	16	4.20	7.70	8.60	8.20	L		
M	W	38	14	12.90	12.90	12.90	12.90			CNC
F	H	38	14	12.90	8.60	12.90	12.90	L		
M	W	38	12	10.80	8.90	6.10	7.50	L		
M	W	38	16	7.10	7.60	10.90	9.70	L		
M	W	38	10	12.90	7.90	11.50	9.20	L		
M	W	39	12	12.90	12.90	12.90	12.90			
F	W	39	12	12.50	7.90	10.30	9.00	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CEPTS
M	AI	39	16	12.90	12.90	12.90	12.90	L		
M	W	39	13	9.30	12.90	12.90	12.90	L		
M	A	39	13	4.70	7.50	8.90	8.20	L		
M	W	39	12	12.90	12.90	12.90	12.90			
M	W	39	GED	8.50	7.90	8.60	8.30	L		
F	B	40	14	12.90	7.20	6.40	6.90	L		
M	W	40	15	12.90	12.90	12.90	12.90			ET
F	W	40	11	12.90	8.20	8.90	8.60	L		
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	40	12	12.90	12.90	12.90	12.90			
M	W	40	12	12.90	9.10	12.90	12.90	L		
M	W	40	12	12.90	12.90	12.90	12.90	L		
M	W	40	16	12.90	10.60	9.60	9.90	L		
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	41	14	12.90	9.30	12.90	11.40	L		
M	W	41	12	8.90	10.10	8.70	8.80	L		
M	W	41	GED	12.90	8.80	12.90	12.70	L		ET*
M	W	41	13	12.90	8.80	12.90	12.70	L		
F	W	41	12	12.90	9.10	12.90	12.90	L		
M	W	41	12	11.10	8.20	9.30	8.70	L		
M	W	41	15	7.30	10.90	12.90	12.90	L		ET*
F	W	41	12	12.90	11.50	8.00	8.90	L		
F	W	42	16	12.90	12.90	12.90	12.90			
M	W	42	16	12.90	12.90	12.90	12.90			ET/MT
M	W	42	12	12.90	9.10	9.30	9.20	L		ET/MT*
F	W	42	14	12.90	9.10	12.90	10.90	L		
M	W	42	13	10.80	7.70	12.90	9.30	L		
M	W	43	12	12.90	7.90	10.30	9.00	L		
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	43	12	12.90	12.90	11.50	12.90	L		
F	AI	43	14	12.90	8.60	8.90	8.80	L		
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	43	12	12.90	12.90	12.90	12.90			
M	W	44	9	12.90	12.90	12.90	12.90	L		
M	W	44	16	12.90	12.90	12.90	12.90	L		
M	W	44	17	12.90	12.90	12.90	12.90			
F	W	44	14	12.90	12.90	12.90	12.90			
M	W	45	13	12.90	8.60	12.90	10.90	L		
F	W	45	12	9.60	8.40	8.60	8.50	L		
F	W	45	GED	12.90	11.50	10.30	10.90	L		
M	W	45	16	12.01	12.90	12.90	12.90	L		
M	W	45	12	12.90	8.20	9.60	8.90	L		
M	W	46	GED	10.60	7.70	9.30	8.50	L		
M	W	46	12	12.90	12.90	12.90	12.90			
M	W	46	12	12.90	8.40	9.30	8.90	L		
F	W	46	GED	12.90	12.90	12.90	12.90			
F	W	46	12	12.90	8.60	12.90	12.20	L		
M	W	46	GED	12.90	7.70	12.90	9.30	L	12.90	
F	W	47	12	12.90	12.90	12.90	12.90			
F	W	47	16	12.90	12.90	12.90	12.90			
M	W	47	14	12.90	12.90	12.90	12.90	L		
M	W	47	12	12.90	8.40	9.60	9.10	L		
M	W	48	12	12.90	12.90	12.90	12.90			
F	B	48	12	5.90	9.10	4.30	6.70	L		
M	B	48	13	12.90	12.90	12.90	12.90			
M	W	49	13	12.90	9.10	12.90	12.90	L		ET*
M	W	49	12	9.20	8.80	9.60	9.20	L		
M	W	50	14	12.90	12.90	12.90	12.90			MT
M	W	51	12	12.90	12.90	12.90	12.90			
M	W	52	16	12.90	10.60	11.50	11.10	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	53	12	12.90	12.90	12.90	12.90			
M	W	53	GED	12.90	7.20	10.30	8.50	L		
M	W	53	GED	8.20	8.20	7.40	7.80	L		
M	W	54	15	12.90	9.10	12.90	10.90	L		
M	W	54	12	10.90	7.90	7.40	7.70	L		
M	W	54	16	12.90	12.90	12.90	12.90			
M	W	54	GED	10.60	12.90	8.90	12.20	L		
M	W	55	16	12.90	12.90	12.90	12.90	L		
M	W	56	16	12.90	12.90	12.90	12.90			
M	W	61	17	12.90	12.90	12.90	12.90			
M	W	62	14	12.90	12.90	12.90	12.90			
M	W	64	16	12.90	11.50	12.90	12.90	L		
M	W	64	12	12.90	12.90	12.90	12.90			

APPENDIX 8b
Recruitment Information by Sex

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
F	W	20	13	12.90	12.90	12.90	12.90			
F	W	32	16	12.90	9.30	12.90	11.40	L		
F	W	23	12	12.90	12.90	12.90	12.90			ET
F	W	23	13	12.90	8.60	8.20	8.40	L		
F	W	27	11	12.90	8.80	8.90	8.80	L		
F	W	21	13	12.90	12.90	12.90	12.90	L		CADD
F	AI	38	16	12.90	10.60	12.90	12.20	L		
F	W	30	GED	11.70	7.30	8.90	8.10	L		
F	W	42	14	12.90	9.10	12.90	10.90	L		
F	W	32	GED	12.90	6.30	8.00	7.00	L	12.90	
F	W	40	11	12.90	8.20	8.90	8.60	L		
F	W	26	12	12.90	12.90	12.90	12.90			
F	W	47	16	12.90	12.90	12.90	12.90			
F	W	36	12	12.90	12.90	12.90	12.90			
F	W	38	12	12.90	8.60	12.90	10.90	L		
F	W	19	12	12.90	12.90	12.90	12.90	L		
F	W	38	13	12.90	12.90	12.90	12.90			
F	W	19	12	12.90	8.80	9.30	9.10	L		
F	W	34	11	9.40	6.70	7.40	7.00	L		
F	W	30	12	12.90	12.90	12.90	12.90			
F	W	45	GED	12.90	11.50	10.30	10.90	L		
F	W	44	14	12.90	12.90	12.90	12.90			
F	W	45	12	9.60	8.40	8.60	8.50	L		
F	W	38	14	12.90	12.90	12.90	12.90			CADD*
F	B	48	12	5.90	9.10	4.30	6.70	L		
F	W	24	16	12.90	12.90	12.90	12.90			
F	W	20	12	12.90	12.90	12.90	12.90	L		
F	W	28	12	12.90	12.90	12.90	12.90			
F	B	20	14	12.90	12.90	12.90	12.90	L		
F	W	31	15	12.90	12.90	12.90	12.90	L		CADD*
F	W	18	11	10.00	10.60	10.30	10.60	L		
F	W	20	12	8.90	9.10	10.30	9.70	L		
F	W	38	14	12.90	8.60	12.90	12.90	L		
F	W	30	GED	8.60	8.60	10.90	9.70	L	10.40	
F	W	39	12	12.50	7.90	10.30	9.00	L		
F	W	25	12	11.70	9.30	9.30	9.30	L		
F	W	37	12	12.90	8.80	12.90	12.70	L		
F	W	41	12	12.90	9.10	12.90	12.90	L		
F	W	23	9	8.90	7.30	7.40	7.40	L		
F	B	22	12	10.80	6.00	8.00	6.90	L		
F	W	34	12	12.90	12.90	12.90	12.90			
F	W	42	16	12.90	12.90	12.90	12.90			
F	W	37	12	12.90	12.90	12.90	12.90	L		
F	W	21	12	12.90	12.90	9.60	11.40	L		
F	W	19	GED	12.90	12.90	12.90	12.90			
F	W	33	10	12.50	6.50	9.30	7.70	L		
F	W	20	GED	12.90	12.90	12.90	12.90			
F	B	30	14	12.90	12.90	12.90	12.90			
F	W	24	12	12.90	7.20	8.90	8.00	L		
F	W	41	12	12.90	11.50	8.00	8.90	L		
F	W	31	11	12.90	6.30	8.60	7.30	L		
F	W	28	12	12.90	7.50	9.60	12.90	L		
F	AI	43	14	12.90	8.60	8.90	8.80	L		
F	W	46	GED	12.90	12.90	12.90	12.90			
F	B	40	14	12.90	7.20	6.40	6.90	L		
F	W	47	12	12.90	12.90	12.90	12.90			
F	W	36	12	12.90	6.90	8.20	7.50	L		
F	W	46	12	12.90	8.60	12.90	12.20	L		
F	W	26	16	7.60	7.30	7.40	7.40	L		
M	W	33	13	12.90	12.90	12.90	12.90	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	22	12	10.20	6.70	9.30	7.80	L		
M	W	39	GED	8.50	7.90	8.60	8.30	L		
M	W	37	16	6.70	12.90	12.90	12.90	L		ET/MT
M	W	41	GED	12.90	8.80	12.90	12.70	L		ET*
M	W	41	12	8.90	10.10	8.70	8.80	L		
M	W	37	16	12.90	12.90	12.90	12.90			
M	W	45	13	12.90	8.60	12.90	10.90	L		
M	W	27	12	12.90	7.90	10.60	10.60	L		
M	W	54	12	10.90	7.90	7.40	7.70	L		
M	W	41	12	11.10	8.20	9.30	8.70	L		
M	W	30	12	7.40	8.60	9.60	9.10	L		
M	W	21	12	10.60	7.30	8.90	8.10	L		
M	W	18	GED	12.90	12.90	12.90	12.90	L		
M	W	43	12	12.90	7.90	10.30	9.00	L		
M	W	23	14	12.90	12.90	12.90	12.90			CADD
M	W	36	14	12.90	8.40	12.90	9.90	L		
M	W	21	13	12.90	12.90	12.90	12.90			
M	W	42	16	12.90	12.90	12.90	12.90			ET/MT
M	W	31	12	12.90	12.90	12.90	12.90			
M	W	26	12	12.90	12.90	12.90	12.90			
M	W	38	16	12.90	12.90	12.90	12.90			ET/MT*
M	W	20	12	12.10	11.50	12.90	12.70	L		
M	W	18	12	7.80	7.90	8.00	8.00	L		
M	H	38	16	8.00	12.90	12.90	12.90	L		
M	W	62	14	12.90	12.90	12.90	12.90			
M	W	26	16	12.90	7.90	11.50	9.20	L		ICT*
M	W	45	12	12.90	8.20	9.60	8.90	L		
M	W	30	12	12.90	7.30	7.70	7.50	L	11.40	
M	W	40	12	12.90	12.90	12.90	12.90			
M	W	39	12	12.90	12.90	12.90	12.90			
M	W	22	11	12.90	12.90	12.90	12.90			
M	W	54	15	12.90	9.10	12.90	10.90	L		
M	W	35	13	12.90	12.90	12.90	12.90	L		
M	W	38	14	12.90	9.10	12.90	12.90	L		
M	W	31	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	32	13	12.90	12.90	12.90	12.90	L		ET/MT/AM
M	W	48	12	12.90	12.90	12.90	12.90			
M	A	26	13	6.50	9.10	8.90	9.00	L	11.40	
M	W	32	15	12.00	12.90	12.90	12.90	L		
M	A	38	16	4.20	7.70	8.60	8.20	L		
M	B	21	12	12.50	7.20	7.40	7.30	L		
M	W	37	10	12.90	12.90	12.90	12.90			
M	W	22	GED	12.90	8.40	12.90	12.90	L		
M	W	53	12	12.90	12.90	12.90	12.90			
M	W	24	12	12.90	7.30	7.70	7.50	L		
M	W	44	17	12.90	12.90	12.90	12.90			
M	W	20	12	12.90	12.90	12.90	12.90			
M	W	31	12	12.90	12.90	12.90	12.90			
M	W	18	12	12.90	9.10	12.90	12.90	L		ET*
M	W	26	13	12.90	8.40	9.60	9.10	L		
M	W	24	14	12.90	12.90	12.90	12.90			
M	W	27	GED	12.90	5.20	8.20	6.50	L		
M	W	36	12	12.90	12.90	12.90	12.90			
M	W	28	12	10.90	8.60	10.30	9.40	L		
M	A	31	16	7.90	11.50	10.30	10.90	L		
M	W	24	12	12.90	10.60	12.90	12.90	L		
M	W	31	13	12.90	12.90	12.90	12.90			
M	W	27	12	12.90	9.10	12.90	12.90	L		
M	W	19	12	12.90	12.90	12.90	12.90	L		
M	W	41	14	12.90	9.30	12.90	11.40	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	29	GED	12.90	12.90	12.90	12.90			
M	W	32	12	12.90	12.90	12.90	12.90	L		
M	W	34	14	12.90	12.90	12.90	12.90			ICT
M	W	38	13	12.90	12.90	12.90	12.90			
M	B	31	13	7.80	8.60	8.20	8.40	L		
M	W	34	GED	11.20	6.00	8.90	7.30	L		
M	W	21	11	8.90	9.30	12.90	12.20	L		
M	W	22	GED	10.80	6.70	9.30	7.80	L		
M	W	46	GED	10.60	7.70	9.30	8.50	L		
M	W	49	13	12.90	9.10	12.90	12.90	L		ET*
M	W	26	11	12.90	7.50	8.20	7.90	L		
M	W	31	8	12.90	8.60	12.90	12.60	L		
M	H	28	13	12.90	8.40	9.60	9.10	L		
M	W	61	17	12.90	12.90	12.90	12.90			
M	W	34	14	4.70	8.40	8.90	8.60	L		
M	B	48	13	12.90	12.90	12.90	12.90			
M	W	26	16	12.90	8.40	12.90	12.90	L		
M	W	64	16	12.90	11.50	12.90	12.90	L		
M	W	53	GED	12.90	7.20	10.30	8.50	L		
M	W	30	12	12.90	7.70	11.50	9.10	L		
M	W	20	12	12.90	12.90	12.90	12.90	L		
M	W	34	12	12.90	12.90	12.90	12.90	L		
M	W	23	12	12.90	12.90	12.90	12.90			
M	W	28	12	10.60	10.60	9.30	9.50	L		
M	W	24	12	12.90	11.50	12.90	12.90	L		
M	W	36	12	12.90	7.00	8.60	7.70	L		
M	W	37	14	12.90	8.80	8.90	8.90	L		CAD
M	W	41	15	7.30	10.90	12.90	12.90	L		ET*
M	W	26	12	6.60	7.70	6.10	7.10	L		
M	W	44	16	12.90	12.90	12.90	12.90	L		
M	W	23	12	12.90	12.90	12.90	12.90			
M	W	21	12	12.90	8.80	12.90	12.70	L		
M	W	18	11	12.90	12.90	12.90	12.90			
M	W	30	12	12.90	12.90	12.90	12.90	L		
M	W	32	12	12.90	12.90	12.90	12.90			
M	W	27	12	12.90	8.60	12.90	10.40	L		
M	W	46	12	12.90	8.40	9.30	8.90	L		
M	W	24	13	12.90	6.50	8.20	7.20	L		
M	W	23	GED	12.90	12.90	12.90	12.90			CADD/CAM
M	W	33	12	12.90	12.90	12.90	12.90			
M	W	38	16	12.90	11.00	11.50	11.10	L	12.90	
M	W	34	13	12.90	12.90	12.90	12.90			
M	W	35	16	12.90	12.90	12.90	12.90			
M	W	33	12	12.90	12.90	12.90	12.90	L		
M	W	37	14	12.90	10.60	12.90	12.90	L		
M	W	34	12	12.50	8.60	8.60	8.60	L		
M	W	20	12	9.30	5.10	5.30	5.10	L		
M	W	34	13	12.90	7.90	10.30	9.00	L		
M	W	50	14	12.90	12.90	12.90	12.90			MT
M	AI	39	16	12.90	12.90	12.90	12.90	L		
M	W	34	GED	12.90	12.90	12.90	12.90			ET*
M	W	33	13	12.90	12.90	12.90	12.90			
M	W	34	15	12.90	12.90	12.90	12.90			
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	38	14	12.90	12.90	12.90	12.90			CNC
M	W	29	12	12.90	12.90	12.90	12.90			
M	W	33	13	12.90	12.90	12.90	12.90	L		
M	W	37	10	12.90	11.50	12.90	12.90	L		
M	W	24	12	12.90	8.60	12.90	12.90	L		
M	W	33	11	12.90	10.60	12.90	12.20	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	34	15	12.90	8.60	11.50	9.70	L	12.90	
M	W	20	13	12.90	9.30	12.90	11.40	L		
M	W	28	14	12.90	9.30	9.60	9.50	L		
M	W	27	12	10.60	9.30	12.90	11.40	L		
M	W	21	12	12.90	11.50	12.90	12.90	L		
M	B	38	13	12.90	6.90	12.90	8.60	L		
M	W	38	10	12.90	7.90	11.50	9.20	L		
M	W	22	13	12.90	9.10	12.90	12.90	L		
M	W	42	12	12.90	9.10	9.30	9.20	L		ET/MT*
M	W	33	15	12.90	12.90	12.90	12.90			
M	W	36	13	12.90	12.90	12.90	12.90	L		
M	W	26	12	12.90	12.90	12.90	12.90			
M	A	29	GED	6.20	7.00	12.90	8.70	L		
M	W	36	12	12.90	12.90	12.90	12.90	L		
M	W	19	12	12.90	12.90	12.90	12.90			ET*
M	B	32	14	6.20	5.50	5.30	5.40	L		
M	W	34	GED	12.90	12.90	12.90	12.90	L		
M	W	53	GED	8.20	8.20	7.40	7.80	L		
M	W	36	GED	12.90	10.60	12.90	12.90	L		
M	W	46	12	12.90	12.90	12.90	12.90			
M	W	27	12	12.90	7.90	11.50	9.70	L		
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	35	10	12.90	9.60	12.50	12.90	L		
M	W	22	14	12.90	12.90	12.90	12.90			
M	W	30	12	11.40	4.90	7.70	5.80	L	9.20	
M	W	40	12	12.90	9.10	12.90	12.90	L		
M	W	47	12	12.90	8.40	9.60	9.10	L		
M	W	54	GED	10.60	12.90	8.90	12.20	L		
M	W	33	13	12.90	10.60	12.90	12.90	L		
M	W	56	16	12.90	12.90	12.90	12.90			
M	W	20	13	10.60	9.10	12.90	10.90	L		CADD*
M	W	24	13	7.90	9.30	12.90	12.90	L		
M	W	20	12	12.50	8.20	8.20	8.20	L		
M	W	37	13	12.90	12.90	12.90	12.90			
M	W	38	16	12.90	8.80	12.90	12.90	L		CADD
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	38	14	12.90	12.90	12.90	12.90			ET/MT*
M	W	36	16	12.90	9.10	12.90	12.90	L		
M	W	33	12	12.90	7.00	9.30	8.10	L		
M	W	39	12	12.90	12.90	12.90	12.90			
M	W	33	12	10.80	6.50	7.70	7.00	L		
M	W	45	16	12.01	12.90	12.90	12.90	L		
M	W	37	13	12.90	12.90	12.90	12.00	L		
M	W	30	12	11.20	12.90	12.90	12.90	L		
M	B	23	14	8.00	10.60	8.60	9.10	L		
M	W	38	12	10.80	8.80	6.10	7.50	L		
M	W	38	16	7.10	7.60	10.90	9.70	L		
M	W	43	12	12.90	12.90	12.90	12.90			
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	32	GED	12.90	12.90	12.90	12.90			
M	W	29	15	12.90	12.90	12.90	12.90			
M	W	27	GED	12.90	7.30	10.30	8.60	L		
M	W	22	12	9.20	7.90	6.70	7.40	L		
M	W	27	12	12.90	10.60	12.90	12.90	L		
M	W	26	12	12.90	8.80	11.50	9.90	L		
M	A	34	14	10.00	12.90	12.90	12.90	L		
M	W	39	13	9.30	12.90	12.90	12.90	L		
M	W	29	16	7.00	12.90	12.90	12.90	L		
M	W	34	12	12.90	6.00	11.50	7.90	L		
M	W	30	12	12.90	8.80	11.50	9.90	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	33	11	12.90	6.50	11.50	8.10	L		
M	W	35	13	12.90	12.90	12.90	12.90			
M	W	25	12	12.90	11.50	12.90	12.70	L		CADD*
M	A	36	13	12.90	12.90	12.90	12.90			
M	A	24	14	6.90	10.60	12.90	12.90	L		ET*
M	W	28	GED	12.90	12.90	12.90	12.90	L		
M	A	39	13	4.70	7.50	8.90	8.20	L		
M	W	33	16	6.30	12.90	12.90	12.90	L		
M	A	34	GED	6.10	9.10	9.30	9.20	L		
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	18	12	12.90	9.10	12.90	11.70	L		
M	W	36	13	12.90	12.90	12.90	12.90			
M	W	47	14	12.90	12.90	12.90	12.90	L		
M	W	21	13	12.90	7.20	7.70	7.40	L	11.40	
M	W	22	12	8.50	12.90	12.90	12.90	L		
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	37	13	12.90	12.90	12.90	12.90	L		
M	W	20	12	12.90	9.30	8.60	9.00	L		
M	W	25	16	12.90	6.90	12.90	10.40	L		
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	34	12	12.90	12.90	12.90	12.90			
M	W	20	12	12.90	11.50	10.30	10.90	L		
M	W	37	12	12.90	12.90	12.90	12.90			
M	W	51	12	12.90	12.90	12.90	12.90			
M	W	28	GED	12.90	12.90	12.90	12.90	L		
M	W	17	10	12.90	12.90	12.90	12.90			
M	W	18	12	12.90	10.60	12.90	12.90	L		
M	W	46	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	32	14	12.90	12.90	12.90	12.90			
M	W	54	16	12.90	12.90	12.90	12.90			
M	W	23	12	12.90	12.90	12.90	12.90	L		
M	W	29	12	12.90	12.90	12.90	12.90			ET/MT*
M	W	31	16	6.20	8.40	9.30	8.90	L		ET/MT*
M	W	28	12	12.90	6.50	8.00	7.10	L		
M	W	25	11	10.40	8.60	10.30	9.40	L		
M	W	23	12	10.20	7.50	9.30	8.40	L		
M	W	19	13	12.90	12.90	12.90	12.90			
M	W	40	16	12.90	10.60	9.60	9.90	L		
M	W	20	12	12.90	12.90	12.90	12.90			
M	W	27	13	12.90	9.30	12.90	12.90	L		
M	W	64	12	12.90	12.90	12.90	12.90			
M	W	55	16	12.90	12.90	12.90	12.90	L		
M	W	20	11	12.90	7.00	7.70	7.30	L		
M	W	44	9	12.90	12.90	12.90	12.90	L		
M	W	43	12	12.90	12.90	11.50	12.90	L		
M	W	34	13	12.90	12.90	12.90	12.90			
M	W	28	12	9.80	8.40	12.90	9.90	L		
M	W	40	12	12.90	12.90	12.90	12.90	L		
M	W	29	12	12.90	8.20	12.90	12.90	L		
M	W	28	13	12.10	8.80	10.30	9.50	L		
M	W	32	GED	12.90	9.30	12.90	12.90	L		
M	W	27	14	12.90	12.90	12.90	12.90			
M	W	52	16	12.90	10.60	11.50	11.10	L		
M	B	33	12	12.90	12.90	12.90	12.90			
M	W	30	8	7.80	7.00	8.20	7.60	L		
M	B	29	12	7.40	12.90	9.60	12.90	L		
M	W	49	12	9.20	8.80	9.60	9.20	L		
M	W	41	13	12.90	8.80	12.90	12.70	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	32	13	12.90	12.90	12.90	12.90			ET*
M	W	19	11	12.90	7.90	12.90	10.60	L		
M	W	22	14	12.90	12.90	12.90	12.90			
M	W	21	12	8.10	8.20	8.60	8.40	L		
M	W	36	16	12.90	6.00	8.00	6.90	L		
M	W	35	14	12.90	12.90	12.90	12.90			
M	W	42	13	10.80	7.70	12.90	9.30	L		
M	A	30	16	10.00	8.60	12.90	10.40	L		
M	W	30	12	12.90	6.50	8.00	7.10	L		
M	W	25	12	8.40	9.60	9.10	12.90	L		
M	W	40	15	12.90	12.90	12.90	12.90			ET
M	W	34	12	12.90	9.30	12.90	12.90	L		
M	W	21	12	12.90	12.90	12.90	12.90			

APPENDIX 8c
Recruitment Information by Race

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	A	24	14	6.90	10.60	12.90	12.90	L		
M	A	31	16	7.90	11.50	10.30	10.90	L		
M	A	38	16	4.20	7.70	8.60	8.20	L		
M	A	29	GED	6.20	7.00	12.90	8.70	L		
M	A	26	13	6.50	9.10	8.90	9.00	L	11.40	
M	A	34	GED	6.10	9.10	9.30	9.20	L		
M	A	34	14	10.00	12.90	12.90	12.90	L		
M	A	39	13	4.70	7.50	8.90	8.20	L		
M	A	36	13	12.90	12.90	12.90	12.90	L		ET*
M	A	30	16	10.00	8.60	12.90	10.40	L		
M	AI	39	16	12.90	12.90	12.90	12.90	L		
F	AI	38	16	12.90	10.60	12.90	12.20	L		
F	AI	43	14	12.90	8.60	8.90	8.80	L		
M	B	48	13	12.90	12.90	12.90	12.90			
M	B	23	14	8.00	10.60	8.60	9.10	L		
M	B	33	12	12.90	12.90	12.90	12.90			
F	B	20	14	12.90	12.90	12.90	12.90	L		
M	B	38	13	12.90	6.90	12.90	8.60	L		
M	B	31	13	7.80	8.60	8.20	8.40	L		
F	B	40	14	12.90	7.20	6.40	6.90	L		
M	B	21	12	12.50	7.20	7.40	7.30	L		
F	B	48	12	5.90	9.10	4.30	6.70	L		
F	B	22	12	10.80	6.00	8.00	6.90	L		
F	B	30	14	12.90	12.90	12.90	12.90			
M	B	32	14	6.20	5.50	5.30	5.40	L		
M	B	29	12	7.40	12.90	9.60	12.90	L		
M	H	38	16	8.00	12.90	12.90	12.90	L		
M	H	28	13	12.90	8.40	9.60	9.10	L		
F	H	38	14	12.90	8.60	12.90	12.90	L		
M	W	46	12	12.90	8.40	9.30	8.90	L		
M	W	33	13	12.90	12.90	12.90	12.90			
M	W	34	15	12.90	12.90	12.90	12.90			
F	W	*20	12	8.90	9.10	10.30	9.70	L		
M	W	40	13	12.90	12.90	12.90	12.90			
F	W	30	GED	8.60	8.60	10.90	9.70	L	10.40	
M	W	38	14	12.90	12.90	12.90	12.90			CNC
F	W	25	12	11.70	9.30	9.30	9.30	L		
M	W	29	12	12.90	12.90	12.90	12.90			
F	W	41	12	12.90	9.10	12.90	12.90	L		
M	W	33	13	12.90	12.90	12.90	12.90	L		
F	W	28	12	12.90	12.90	12.90	12.90			
M	W	37	10	12.90	11.50	12.90	12.90	L		
F	W	42	16	12.90	12.90	12.90	12.90			
M	W	24	12	12.90	8.60	12.90	12.90	L		
F	W	21	12	12.90	12.90	9.60	11.40	L		
M	W	33	11	12.90	10.60	12.90	12.20	L		
F	W	33	10	12.50	6.50	9.30	7.70	L		
M	W	34	15	12.90	8.60	11.50	9.70	L	12.90	
F	W	20	12	12.90	12.90	12.90	12.90	L		
M	W	20	13	12.90	9.30	12.90	11.40	L		
F	W	41	12	12.90	11.50	8.00	8.90	L		
M	W	28	14	12.90	9.30	9.60	9.50	L		
F	W	28	12	12.90	7.50	9.60	12.90	L		
M	W	27	12	10.60	9.30	12.90	11.40	L		
F	W	46	GED	12.90	12.90	12.90	12.90			
M	W	21	12	12.90	11.50	12.90	12.90	L		
F	W	47	12	12.90	12.90	12.90	12.90			
F	W	36	12	12.90	12.90	12.90	12.90			
F	W	46	12	12.90	8.60	12.90	12.20	L		
M	W	38	10	12.90	7.90	11.50	9.20	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	33	13	12.90	12.90	12.90	12.90	L		
M	W	22	13	12.90	9.10	12.90	12.90	L		
M	W	39	GED	8.50	7.90	8.60	8.30	L		
M	W	42	12	12.90	9.10	9.30	9.20	L		ET/MT*
M	W	41	GED	12.90	8.80	12.90	12.70	L		ET*
M	W	33	15	12.90	12.90	12.90	12.90			
M	W	37	16	12.90	12.90	12.90	12.90			
M	W	36	13	12.90	12.90	12.90	12.90	L		
M	W	27	12	12.90	7.90	10.60	10.60	L		
M	W	26	12	12.90	12.90	12.90	12.90			
M	W	41	12	11.10	8.20	9.30	8.70	L		
F	W	47	16	12.90	12.90	12.90	12.90			
M	W	21	12	10.60	7.30	8.90	8.10	L		
M	W	36	12	12.90	12.90	12.90	12.90	L		
M	W	43	12	12.90	7.90	10.30	9.00	L		
M	W	19	12	12.90	12.90	12.90	12.90			ET*
M	W	36	14	12.90	8.40	12.90	9.90	L		
F	W	26	12	12.90	12.90	12.90	12.90			
M	W	42	16	12.90	12.90	12.90	12.90			ET/MT
M	W	34	GED	12.90	12.90	12.90	12.90	L		
M	W	26	12	12.90	12.90	12.90	12.90			
M	W	53	GED	8.20	8.20	7.40	7.80	L		
M	W	20	12	12.10	11.50	12.90	12.70	L		
M	W	36	GED	12.90	10.60	12.90	12.90	L		
F	W	45	12	9.60	8.40	8.60	8.50	L		
M	W	46	12	12.90	12.90	12.90	12.90			
M	W	26	16	12.90	7.90	11.50	9.20	L		ICT*
M	W	27	12	12.90	7.90	11.50	9.70	L		
M	W	30	12	12.90	7.30	7.70	7.50	L	11.40	
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	39	12	12.90	12.90	12.90	12.90			
M	W	35	10	12.90	9.60	12.50	12.90	L		
M	W	54	15	12.90	9.10	12.90	10.90	L		
M	W	22	14	12.90	12.90	12.90	12.90			
M	W	38	14	12.90	9.10	12.90	12.90	L		
M	W	30	12	11.40	4.90	7.70	5.80	L	9.20	
M	W	32	13	12.90	12.90	12.90	12.90	L		ET/MT/AM
M	W	40	12	12.90	9.10	12.90	12.90	L		
F	W	44	14	12.90	12.90	12.90	12.90			
M	W	47	12	12.90	8.40	9.60	9.10	L		
F	W	45	GED	12.90	11.50	10.30	10.90	L		
M	W	54	GED	10.60	12.90	8.90	12.20	L		
M	W	37	10	12.90	12.90	12.90	12.90			
M	W	33	13	12.90	10.60	12.90	12.90	L		
M	W	53	12	12.90	12.90	12.90	12.90			
M	W	56	16	12.90	12.90	12.90	12.90			
M	W	44	17	12.90	12.90	12.90	12.90			
M	W	20	13	10.60	9.10	12.90	10.90	L		CADD*
M	W	31	12	12.90	12.90	12.90	12.90			
M	W	24	13	7.90	9.30	12.90	12.90	L		
M	W	26	13	12.90	8.40	9.60	9.10	L		
M	W	20	12	12.50	8.20	8.20	8.20	L		
M	W	27	GED	12.90	5.20	8.20	6.50	L		
M	W	37	13	12.90	12.90	12.90	12.90			
M	W	28	12	10.90	8.60	10.30	9.40	L		
M	W	38	16	12.90	8.80	12.90	12.90	L		CADD
M	W	24	12	12.90	10.60	12.90	12.90	L		
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	27	12	12.90	9.10	12.90	12.90	L		
M	W	38	14	12.90	12.90	12.90	12.90			ET/MT*

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	41	14	12.90	9.30	12.90	11.40	L		
M	W	36	16	12.90	9.10	12.90	12.90	L		
M	W	32	12	12.90	12.90	12.90	12.90	L		
M	W	33	12	12.90	7.00	9.30	8.10	L		
M	W	38	13	12.90	12.90	12.90	12.90			
M	W	39	12	12.90	12.90	12.90	12.90			
M	W	34	GED	11.20	6.00	8.90	7.30	L		
M	W	33	12	10.80	6.50	7.70	7.00	L		
M	W	22	GED	10.80	6.70	9.30	7.80	L		
M	W	45	16	12.01	12.90	12.90	12.90	L		
M	W	49	13	12.90	9.10	12.90	12.90	L		ET*
M	W	37	13	12.90	12.90	12.90	12.00	L		
M	W	31	8	12.90	8.60	12.90	12.60	L		
M	W	30	12	11.20	12.90	12.90	12.90	L		
M	W	61	17	12.90	12.90	12.90	12.90			
F	W	40	11	12.90	8.20	8.90	8.60	L		
F	W	19	12	12.90	12.90	12.90	12.90	L		
M	W	38	12	10.80	8.80	6.10	7.50	L		
M	W	64	16	12.90	11.50	12.90	12.90	L		
M	W	38	16	7.10	7.60	10.90	9.70	L		
M	W	30	12	12.90	7.70	11.50	9.10	L		
M	W	43	12	12.90	12.90	12.90	12.90			
M	W	34	12	12.90	12.90	12.90	12.90	L		
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	28	12	10.60	10.60	9.30	9.50	L		
M	W	32	GED	12.90	12.90	12.90	12.90			
M	W	36	12	12.90	7.00	8.60	7.70	L		
M	W	29	15	12.90	12.90	12.90	12.90			
M	W	41	15	7.30	10.90	12.90	12.90	L		ET*
M	W	27	GED	12.90	7.30	10.30	8.60	L		
M	W	44	16	12.90	12.90	12.90	12.90	L		
M	W	22	12	9.20	7.90	6.70	7.40	L		
M	W	21	12	12.90	8.80	12.90	12.70	L		
M	W	27	12	12.90	10.60	12.90	12.90	L		
M	W	30	12	12.90	12.90	12.90	12.90	L		
M	W	26	12	12.90	8.80	11.50	9.90	L		
M	W	27	12	12.90	8.60	12.90	10.40	L		
F	W	32	GED	12.90	6.30	8.00	7.00	L	12.90	
M	W	24	13	12.90	6.50	8.20	7.20	L		
M	W	39	13	9.30	12.90	12.90	12.90	L		
M	W	33	12	12.90	12.90	12.90	12.90			
M	W	29	16	7.00	12.90	12.90	12.90	L		
M	W	34	13	12.90	12.90	12.90	12.90			
M	W	34	12	12.90	6.00	11.50	7.90	L		
M	W	33	12	12.90	12.90	12.90	12.90	L		
M	W	30	12	12.90	8.80	11.50	9.90	L		
M	W	34	12	12.50	8.60	8.60	8.60	L		
M	W	33	11	12.90	6.50	11.50	8.10	L		
M	W	34	13	12.90	7.90	10.30	9.00	L		
M	W	35	13	12.90	12.90	12.90	12.90			
F	W	30	12	12.90	8.60	12.90	10.90	L		
M	W	25	12	12.90	11.50	12.90	12.70	L		CADD*
F	W	18	11	10.00	10.60	10.30	10.60	L		
M	W	19	11	12.90	12.90	12.90	12.90			
F	W	39	12	12.50	7.90	10.30	9.00	L		
F	W	42	14	12.90	9.10	12.90	10.90	L		
F	W	23	9	8.90	7.30	7.40	7.40	L		
F	W	30	GED	11.70	7.30	8.90	8.10	L		
F	W	37	12	12.90	12.90	12.90	12.90	L		
M	W	28	GED	12.90	12.90	12.90	12.90	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
F	W	20	GED	12.90	12.90	12.90	12.90			
F	W	21	13	12.90	12.90	12.90	12.90	L		CADD
F	W	31	11	12.90	6.30	8.60	7.30	L		
M	W	33	16	6.30	12.90	12.90	12.90	L		
F	W	38	14	12.90	12.90	12.90	12.90			CADD*
F	W	27	11	12.90	8.80	8.90	8.80	L		
F	W	26	16	7.60	7.30	7.40	7.40	L		
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	37	16	6.70	12.90	12.90	12.90	L		ET/MT
M	W	18	12	12.90	9.10	12.90	11.70	L		
M	W	45	13	12.90	8.60	12.90	10.90	L		
M	W	36	13	12.90	12.90	12.90	12.90			
M	W	30	12	7.40	8.60	9.60	9.10	L		
M	W	47	14	12.90	12.90	12.90	12.90	L		
M	W	23	14	12.90	12.90	12.90	12.90			CADD
M	W	21	13	12.90	7.20	7.70	7.40	L	11.40	
M	W	31	12	12.90	12.90	12.90	12.90			
M	W	22	12	8.50	12.90	12.90	12.90	L		
M	W	18	12	7.80	7.90	8.00	8.00	L		
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	45	12	12.90	8.20	9.60	8.90	L		
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	22	11	12.90	12.90	12.90	12.90			
M	W	37	13	12.90	12.90	12.90	12.90	L		
M	W	31	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	20	12	12.90	9.30	8.60	9.00	L		
M	W	32	15	12.00	12.90	12.90	12.90	L		
M	W	25	16	12.90	6.90	12.90	10.40	L		
M	W	22	GED	12.90	8.40	12.90	12.90	L		
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	20	12	12.90	12.90	12.90	12.90			
M	W	34	12	12.90	12.90	12.90	12.90			
M	W	24	14	12.90	12.90	12.90	12.90			
M	W	20	12	12.90	11.50	10.30	10.90	L		
F	W	34	11	9.40	6.70	7.40	7.00	L		
M	W	37	12	12.90	12.90	12.90	12.90			
M	W	19	12	12.90	12.90	12.90	12.90	L		
M	W	51	12	12.90	12.90	12.90	12.90			
M	W	34	14	12.90	12.90	12.90	12.90			ICT
M	W	28	GED	12.90	12.90	12.90	12.90	L		
M	W	21	11	8.90	9.30	12.90	12.20	L		
M	W	17	10	12.90	12.90	12.90	12.90			
M	W	26	11	12.90	7.50	8.20	7.90	L		
M	W	18	12	12.90	10.60	12.90	12.90	L		
M	W	34	14	4.70	8.40	8.90	8.60	L		
M	W	46	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	53	GED	12.90	7.20	10.30	8.50	L		
M	W	32	14	12.90	12.90	12.90	12.90			
M	W	23	12	12.90	12.90	12.90	12.90			
M	W	54	16	12.90	12.90	12.90	12.90			
M	W	37	14	12.90	8.80	8.90	8.90	L		CAD
M	W	23	12	12.90	12.90	12.90	12.90	L		
M	W	23	12	12.90	12.90	12.90	12.90			
M	W	29	12	12.90	12.90	12.90	12.90			ET/MT*
M	W	32	12	12.90	12.90	12.90	12.90			
M	W	31	16	6.20	8.40	9.30	8.90	L		ET/MT*
M	W	23	GED	12.90	12.90	12.90	12.90			CADD/CAM
M	W	28	12	12.90	6.50	8.00	7.10	L		
M	W	35	16	12.90	12.90	12.90	12.90			
M	W	25	11	10.40	8.60	10.30	9.40	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	20	12	9.30	5.10	5.30	5.10	L		
M	W	23	12	10.20	7.50	9.30	8.40	L		
M	W	34	GED	12.90	12.90	12.90	12.90			ET*
M	W	19	13	12.90	12.90	12.90	12.90			
F	W	37	12	12.90	8.80	12.90	12.70	L		
M	W	40	16	12.90	10.60	9.60	9.90	L		
F	W	19	GED	12.90	12.90	12.90	12.90			
M	W	20	12	12.90	12.90	12.90	12.90			
F	W	24	16	12.90	12.90	12.90	12.90			
M	W	27	13	12.90	9.30	12.90	12.90	L		
M	W	22	12	10.20	6.70	9.30	7.80	L		
M	W	64	12	12.90	12.90	12.90	12.90			
M	W	54	12	10.90	7.90	7.40	7.70	L		
M	W	55	16	12.90	12.90	12.90	12.90	L		
M	W	21	13	12.90	12.90	12.90	12.90			
M	W	20	11	12.90	7.00	7.70	7.30	L		
M	W	62	14	12.90	12.90	12.90	12.90			
M	W	44	9	12.90	12.90	12.90	12.90	L		
M	W	35	13	12.90	12.90	12.90	12.90	L		
M	W	43	12	12.90	12.90	11.50	12.90	L		
F	W	30	12	12.90	12.90	12.90	12.90			
M	W	34	13	12.90	12.90	12.90	12.90			
M	W	18	12	12.90	9.10	12.90	12.90	L		ET*
M	W	28	12	9.80	8.40	12.90	9.90	L		
M	W	31	13	12.90	12.90	12.90	12.90			
M	W	40	12	12.90	12.90	12.90	12.90	L		
F	W	19	12	12.90	8.80	9.30	9.10	L		
M	W	29	12	12.90	8.20	12.90	12.90	L		
F	W	38	13	12.90	12.90	12.90	12.90			
M	W	28	13	12.10	8.80	10.30	9.50	L		
M	W	20	12	12.90	12.90	12.90	12.90	L		
M	W	32	GED	12.90	9.30	12.90	12.90	L		
M	W	26	12	6.60	7.70	6.10	7.10	L		
M	W	27	14	12.90	12.90	12.90	12.90			
F	W	20	13	12.90	12.90	12.90	12.90			
M	W	52	16	12.90	10.60	11.50	11.10	L		
M	W	37	14	12.90	10.60	12.90	12.90	L		
F	W	23	13	12.90	8.60	8.20	8.40	L		
F	W	31	15	12.90	12.90	12.90	12.90	L		CADD*
M	W	30	8	7.80	7.00	8.20	7.60	L		
F	W	24	12	12.90	7.20	8.90	8.00	L		
F	W	23	12	12.90	12.90	12.90	12.90			ET
M	W	41	12	8.90	10.10	8.70	8.80	L		
M	W	49	12	9.20	8.80	9.60	9.20	L		
M	W	38	16	12.90	12.90	12.90	12.90			ET/MT*
M	W	41	13	12.90	8.80	12.90	12.70	L		
M	W	48	12	12.90	12.90	12.90	12.90			
M	W	32	13	12.90	12.90	12.90	12.90			ET*
M	W	36	12	12.90	12.90	12.90	12.90			
M	W	19	11	12.90	7.90	12.90	10.60	L		
M	W	46	GED	10.60	7.70	9.30	8.50	L		
M	W	22	14	12.90	12.90	12.90	12.90			
M	W	24	12	12.90	11.50	12.90	12.90	L		
M	W	21	12	8.10	8.20	8.60	8.40	L		
M	W	38	16	12.90	11.00	11.50	11.10	L	12.90	
M	W	36	16	12.90	6.00	8.00	6.90	L		
F	W	34	12	12.90	12.90	12.90	12.90			
M	W	35	14	12.90	12.90	12.90	12.90			
M	W	18	GED	12.90	12.90	12.90	12.90	L		
M	W	42	13	10.80	7.70	12.90	9.30	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	24	12	12.90	7.30	7.70	7.50	L		
F	W	32	16	12.90	9.30	12.90	11.40	L		
M	W	26	16	12.90	8.40	12.90	12.90	L		
M	W	30	12	12.90	6.50	8.00	7.10	L		
M	W	50	14	12.90	12.90	12.90	12.90			MT
M	W	25	12	8.40	9.60	9.10	12.90	L		
M	W	40	12	12.90	12.90	12.90	12.90			
M	W	40	15	12.90	12.90	12.90	12.90			ET
M	W	18	11	12.90	12.90	12.90	12.90			
M	W	29	GED	12.90	12.90	12.90	12.90			
F	W	36	12	12.90	6.90	8.20	7.50	L		
M	W	34	12	12.90	9.30	12.90	12.90	L		
M	W	21	12	12.90	12.90	12.90	12.90			

APPENDIX 8d
Recruitment Information by Education Level of Student

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	27	GED	12.90	5.20	8.20	6.50	L		
F	W	32	GED	12.90	6.30	8.00	7.00	L	12.90	
M	W	23	GED	12.90	12.90	12.90	12.90			CADD/CAM
M	W	41	GED	12.90	8.80	12.90	12.70	L		ET*
M	W	34	GED	11.20	6.00	8.90	7.30	L		
M	W	32	GED	12.90	12.90	12.90	12.90			
M	W	46	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	28	GED	12.90	12.90	12.90	12.90	L		
M	W	18	GED	12.90	12.90	12.90	12.90	L		
F	W	20	GED	12.90	12.90	12.90	12.90			
M	W	46	GED	10.60	7.70	9.30	8.50	L		
M	W	54	GED	10.60	12.90	8.90	12.20	L		
M	W	36	GED	12.90	10.60	12.90	12.90	L		
M	W	32	GED	12.90	9.30	12.90	12.90	L		
M	W	22	GED	10.80	6.70	9.30	7.80	L		
M	W	28	GED	12.90	12.90	12.90	12.90	L		
F	W	19	GED	12.90	12.90	12.90	12.90			
M	W	53	GED	8.20	8.20	7.40	7.80	L		
F	W	46	GED	12.90	12.90	12.90	12.90			
M	W	31	GED	12.90	7.70	12.90	9.30	L	12.90	
M	W	34	GED	12.90	12.90	12.90	12.90	L		
M	W	29	GED	12.90	12.90	12.90	12.90			
F	W	45	GED	12.90	11.50	10.30	10.90	L		
M	A	29	GED	6.20	7.00	12.90	8.70	L		
M	W	27	GED	12.90	7.30	10.30	8.60	L		
F	W	30	GED	8.60	8.60	10.90	9.70	L	10.40	
M	A	34	GED	6.10	9.10	9.30	9.20	L		
M	W	39	GED	8.50	7.90	8.60	8.30	L		
M	W	22	GED	12.90	8.40	12.90	12.90	L		
M	W	34	GED	12.90	12.90	12.90	12.90			ET*
F	W	30	GED	11.70	7.30	8.90	8.10	L		
M	W	53	GED	12.90	7.20	10.30	8.50	L		
M	W	31	8	12.90	8.60	12.90	12.60	L		
M	W	30	8	7.80	7.00	8.20	7.60	L		
M	W	44	9	12.90	12.90	12.90	12.90	L		
F	W	23	9	8.90	7.30	7.40	7.40	L		
F	W	33	10	12.50	6.50	9.30	7.70	L		
M	W	37	10	12.90	11.50	12.90	12.90	L		
M	W	17	10	12.90	12.90	12.90	12.90			
M	W	35	10	12.90	9.60	12.50	12.90	L		
M	W	38	10	12.90	7.90	11.50	9.20	L		
M	W	37	10	12.90	12.90	12.90	12.90			
M	W	26	11	12.90	7.50	8.20	7.90	L		
M	W	22	11	12.90	12.90	12.90	12.90			
M	W	25	11	10.40	8.60	10.30	9.40	L		
M	W	33	11	12.90	10.60	12.90	12.20	L		
F	W	31	11	12.90	6.30	8.60	7.30	L		
F	W	27	11	12.90	8.80	8.90	8.80	L		
M	W	19	11	12.90	12.90	12.90	12.90			
M	W	19	11	12.90	7.90	12.90	10.60	L		
M	W	18	11	12.90	12.90	12.90	12.90			
M	W	33	11	12.90	6.50	11.50	8.10	L		
F	W	18	11	10.00	10.60	10.30	10.60	L		
F	W	40	11	12.90	8.20	8.90	8.60	L		
M	W	20	11	12.90	7.00	7.70	7.30	L		
M	W	21	11	8.90	9.30	12.90	12.20	L		
F	W	34	11	9.40	6.70	7.40	7.00	L		
M	W	27	12	12.90	8.60	12.90	10.40	L		
M	W	40	12	12.90	12.90	12.90	12.90			
M	W	30	12	12.90	12.90	12.90	12.90	L		

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
F	W	46	12	12.90	8.60	12.90	12.20	L		
M	W	30	12	7.40	8.60	9.60	9.10	L		
M	W	46	12	12.90	8.40	9.30	8.90	L		
M	W	30	12	12.90	8.80	11.50	9.90	L		
M	W	23	12	12.90	12.90	12.90	12.90	L		
F	W	30	12	12.90	12.90	12.90	12.90			
M	W	46	12	12.90	12.90	12.90	12.90			
M	W	30	12	12.90	6.50	8.00	7.10	L		
M	W	45	12	12.90	8.20	9.60	8.90	L		
M	W	30	12	12.90	7.30	7.70	7.50	L		11.40
M	W	24	12	12.90	8.60	12.90	12.90	L		
M	W	49	12	9.20	8.80	9.60	9.20	L		
F	W	47	12	12.90	12.90	12.90	12.90			
M	W	30	12	11.20	12.90	12.90	12.90	L		
M	W	24	12	12.90	10.60	12.90	12.90	L		
M	W	21	12	10.60	7.30	8.90	8.10	L		
M	W	25	12	8.40	9.60	9.10	12.90	L		
M	W	51	12	12.90	12.90	12.90	12.90			
M	W	22	12	8.50	12.90	12.90	12.90	L		
M	W	30	12	12.90	7.70	11.50	9.10	L		
F	W	25	12	11.70	9.30	9.30	9.30	L		
F	W	21	12	12.90	12.90	9.60	11.40	L		
M	W	43	12	12.90	12.90	12.90	12.90			
M	W	53	12	12.90	12.90	12.90	12.90			
M	W	43	12	12.90	12.90	11.50	12.90	L		
M	W	39	12	12.90	12.90	12.90	12.90			
F	W	26	12	12.90	12.90	12.90	12.90			
F	W	39	12	12.50	7.90	10.30	9.00	L		
M	W	26	12	12.90	12.90	12.90	12.90			
M	W	30	12	11.40	4.90	7.70	5.80	L		9.20
M	W	42	12	12.90	9.10	9.30	9.20	L		ET/MT*
M	W	20	12	12.90	9.30	8.60	9.00	L		
M	W	34	12	12.50	8.60	8.60	8.60	L		
M	W	31	12	12.90	12.90	12.90	12.90			
M	W	21	12	12.90	11.50	12.90	12.90	L		
M	W	39	12	12.90	12.90	12.90	12.90			
M	W	27	12	12.90	7.90	11.50	9.70	L		
M	W	20	12	12.90	12.90	12.90	12.90			
M	W	27	12	10.60	9.30	12.90	11.40	L		
M	W	38	12	10.80	8.80	6.10	7.50	L		
M	W	48	12	12.90	12.90	12.90	12.90			
M	W	20	12	12.50	8.20	8.20	8.20	L		
F	W	41	12	12.90	9.10	12.90	12.90	L		
F	W	38	12	12.90	8.60	12.90	10.90	L		
M	W	41	12	8.90	10.10	8.70	8.80	L		
F	W	37	12	12.90	8.80	12.90	12.70	L		
F	B	48	12	5.90	9.10	4.30	6.70	L		
M	W	20	12	9.30	5.10	5.30	5.10	L		
M	W	28	12	9.80	8.40	12.90	9.30	L		
M	W	31	12	12.90	12.90	12.90	12.90			
M	W	28	12	10.90	8.60	10.30	9.40	L		
M	W	54	12	10.90	7.90	7.40	7.70	L		
F	W	28	12	12.90	12.90	12.90	12.90			
M	W	20	12	12.90	12.90	12.90	12.90			
M	W	29	12	12.90	12.90	12.90	12.90			
M	W	20	12	12.90	12.90	12.90	12.90	L		
M	W	40	12	12.90	9.10	12.90	12.90	L		
F	W	37	12	12.90	12.90	12.90	12.90	L		ET/MT*
M	W	29	12	12.90	12.90	12.90	12.90			
M	W	32	12	12.90	12.90	12.90	12.90			

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	B	29	12	7.40	12.90	9.60	12.90	L		
M	W	37	12	12.90	12.90	12.90	12.90			
M	W	23	12	12.90	12.90	12.90	12.90			
M	W	32	12	12.90	12.90	12.90	12.90	L		
F	W	23	12	12.90	12.90	12.90	12.90			ET
M	W	20	12	12.90	11.50	10.30	10.90	L		
M	W	24	12	12.90	11.50	12.90	12.90	L		
F	W	36	12	12.90	6.90	8.20	7.50	L		
F	W	45	12	9.60	8.40	8.60	8.50	L		
F	W	20	12	12.90	12.90	12.90	12.90	L		
M	W	22	12	9.20	7.90	6.70	7.40	L		
M	W	20	12	12.10	11.50	12.90	12.70	L		
M	W	47	12	12.90	8.40	9.60	9.10	L		
M	B	33	12	12.90	12.90	12.90	12.90			
M	W	43	12	12.90	7.90	10.30	9.00	L		
M	W	33	12	10.80	6.50	7.70	7.00	L		
M	W	26	12	12.90	8.80	11.50	9.90	L		
M	W	36	12	12.90	12.90	12.90	12.90			
F	B	22	12	10.80	6.00	8.00	6.90	L		
F	W	20	12	8.90	9.10	10.30	9.70	L		
M	W	27	12	12.90	7.90	10.60	10.60	L		
M	W	36	12	12.90	12.90	12.90	12.90	L		
M	W	27	12	12.90	10.60	12.90	12.90	L		
F	W	19	12	12.90	12.90	12.90	12.90	L		
M	W	40	12	12.90	12.90	12.90	12.90	L		
M	W	33	12	12.90	7.00	9.30	8.10	L		
M	W	28	12	10.60	10.60	9.30	9.50	L		
M	W	19	12	12.90	12.90	12.90	12.90			ET=
M	W	21	12	8.10	8.20	8.60	8.40	L		
M	W	36	12	12.90	7.00	8.60	7.70	L		
M	B	21	12	12.50	7.20	7.40	7.30	L		
F	W	36	12	12.90	12.90	12.90	12.90			
M	W	23	12	12.90	12.90	12.90	12.90			
M	W	64	12	12.90	12.90	12.90	12.90			
M	W	22	12	10.20	6.70	9.30	7.80	L		
M	W	33	12	12.90	12.90	12.90	12.90			
F	W	24	12	12.90	7.20	8.90	8.00	L		
M	W	33	12	12.90	12.90	12.90	12.90	L		
M	W	26	12	6.60	7.70	6.10	7.10	L		
F	W	19	12	12.90	8.80	9.30	9.10	L		
F	W	41	12	12.90	11.50	8.00	8.90	L		
M	W	19	12	12.90	12.90	12.90	12.90	L		
M	W	41	12	11.10	8.20	9.30	8.70	L		
M	W	18	12	12.90	9.10	12.90	12.90	L		ET=
F	W	28	12	12.90	7.50	9.60	12.90	L		
M	W	18	12	12.90	9.10	12.90	11.70	L		
M	W	29	12	12.90	8.20	12.90	12.90	L		
M	W	34	12	12.90	9.30	12.90	12.90	L		
M	W	23	12	10.20	7.50	9.30	8.40	L		
M	W	34	12	12.90	6.00	11.50	7.90	L		
M	W	25	12	12.90	11.50	12.90	12.70	L		CADD=
M	W	34	12	12.90	12.90	12.90	12.90			
M	W	27	12	12.90	9.10	12.90	12.90	L		
M	W	34	12	12.90	12.90	12.90	12.90	L		
M	W	28	12	12.90	6.50	8.00	7.10	L		
F	W	34	12	12.90	12.90	12.90	12.90			
M	W	24	12	12.90	7.30	7.70	7.50	L		
M	W	18	12	12.90	10.60	12.90	12.90	L		
M	W	21	12	12.90	12.90	12.90	12.90			
M	W	26	12	12.90	12.90	12.90	12.90			

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	21	12	12.90	8.80	12.90	12.70	L		
M	W	18	12	7.80	7.90	8.00	8.00	L		
M	W	32	13	12.90	12.90	12.90	12.90	L		ET/MT/AM
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	34	13	12.90	12.90	12.90	12.90			
M	W	49	13	12.90	9.10	12.90	12.90	L		ET*
M	W	37	13	12.90	12.90	12.90	12.00	L		
M	W	28	13	12.10	8.80	10.30	9.50	L		
M	W	45	13	12.90	8.60	12.90	10.90	L		
M	W	37	13	12.90	12.90	12.90	12.90			
M	W	34	13	12.90	12.90	12.90	12.90			
M	W	37	13	12.90	12.90	12.90	12.90	L		
M	W	19	13	12.90	12.90	12.90	12.90			
M	W	40	13	12.90	12.90	12.90	12.90			
M	W	42	13	10.80	7.70	12.90	9.30	L		
M	W	22	13	12.90	9.10	12.90	12.90	L		
M	W	35	13	12.90	12.90	12.90	12.90	L		
M	H	28	13	12.90	8.40	9.60	9.10	L		
F	W	23	13	12.90	8.60	8.20	8.40	L		
M	A	26	13	6.50	9.10	8.90	9.00	L	11.40	
M	W	33	13	12.90	12.90	12.90	12.90	L		
M	W	33	13	12.90	12.90	12.90	12.90	L		
M	W	32	13	12.90	12.90	12.90	12.90			ET*
M	W	20	13	12.90	9.30	12.90	11.40	L		
M	B	31	13	7.80	8.60	8.20	8.40	L		
M	W	36	13	12.90	12.90	12.90	12.90			
M	W	20	13	10.60	9.10	12.90	10.90	L		CADD*
M	W	41	13	12.90	8.80	12.90	12.70	L		
F	W	20	13	12.90	12.90	12.90	12.90			
M	W	34	13	12.90	7.90	10.30	9.00	L		
F	W	21	13	12.90	12.90	12.90	12.90	L		CADD
M	W	24	13	12.90	6.50	8.20	7.20	L		
M	A	39	13	4.70	7.50	8.90	8.20	L		
M	W	35	13	12.90	12.90	12.90	12.90			
M	W	39	13	9.30	12.90	12.90	12.90	L		
M	W	38	13	12.90	12.90	12.90	12.90			
F	W	38	13	12.90	12.90	12.90	12.90			
M	W	36	13	12.90	12.90	12.90	12.90	L		
M	W	31	13	12.90	12.90	12.90	12.90			
M	A	36	13	12.90	12.90	12.90	12.90	L		ET*
M	W	21	13	12.90	12.90	12.90	12.90			
M	W	26	13	12.90	8.40	9.60	9.10	L		
M	B	48	13	12.90	12.90	12.90	12.90			
M	W	33	13	12.90	10.60	12.90	12.90	L		
M	B	38	13	12.90	6.90	12.90	8.60	L		
M	W	24	13	7.90	9.30	12.90	12.90	L		
M	W	27	13	12.90	9.30	12.90	12.90	L		
M	W	33	13	12.90	12.90	12.90	12.90			
M	W	21	13	12.90	7.20	7.70	7.40	L	11.40	
F	B	40	14	12.90	7.20	6.40	6.90	L		
F	W	44	14	12.90	12.90	12.90	12.90			
M	W	34	14	4.70	8.40	8.90	8.60	L		
F	AI	43	14	12.90	8.60	8.90	8.80	L		
M	W	50	14	12.90	12.90	12.90	12.90			MT
M	A	34	14	10.00	12.90	12.90	12.90	L		
F	H	38	14	12.90	8.60	12.90	12.90	L		
M	W	37	14	12.90	8.80	8.90	8.90	L		CAD
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	37	14	12.90	10.60	12.90	12.90	L		
M	W	38	14	12.90	12.90	12.90	12.90			ET/MT*

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
F	W	38	14	12.90	12.90	12.90	12.90			CADD*
M	W	47	14	12.90	12.90	12.90	12.90	L		
M	W	41	14	12.90	9.30	12.90	11.40	L		
M	W	34	14	12.90	12.90	12.90	12.90			ICT
M	W	24	14	12.90	12.90	12.90	12.90			
M	W	22	14	12.90	12.90	12.90	12.90			
M	W	28	14	12.90	9.30	9.60	9.50	L		
M	A	24	14	6.90	10.60	12.90	12.90	L		
M	B	32	14	6.20	5.50	5.30	5.40	L		
F	W	42	14	12.90	9.10	12.90	10.90	L		
M	W	35	14	12.90	12.90	12.90	12.90			
M	W	38	14	12.90	9.10	12.90	12.90	L		
M	W	27	14	12.90	12.90	12.90	12.90			
M	W	30	14	12.90	12.90	12.90	12.90			
M	W	62	14	12.90	12.90	12.90	12.90			
F	B	30	14	12.90	12.90	12.90	12.90			
M	W	36	14	12.90	8.40	12.90	9.90	L		
M	W	30	14	12.90	12.90	12.90	12.90			
F	B	20	14	12.90	12.90	12.90	12.90	L		
M	W	22	14	12.90	12.90	12.90	12.90			
M	B	23	14	8.00	10.60	8.60	9.10	L		
M	W	32	14	12.90	12.90	12.90	12.90			
M	W	21	14	12.90	12.90	12.90	12.90			
M	W	38	14	12.90	12.90	12.90	12.90			CNC
M	W	23	14	12.90	12.90	12.90	12.90			CADD
M	W	54	15	12.90	9.10	12.90	10.90	L		
M	W	34	15	12.90	12.90	12.90	12.90			
M	W	40	15	12.90	12.90	12.90	12.90			ET
M	W	33	15	12.90	12.90	12.90	12.90			
M	W	34	15	12.90	8.60	11.50	9.70	L	12.90	
M	W	29	15	12.90	12.90	12.90	12.90			
M	W	32	15	12.00	12.90	12.90	12.90	L		
M	W	41	15	7.30	10.90	12.90	12.90	L		ET*
F	W	31	15	12.90	12.90	12.90	12.90	L		CADD*
M	W	29	16	7.00	12.90	12.90	12.90	L		
M	A	38	16	4.20	7.70	8.60	8.20	L		
M	W	44	16	12.90	12.90	12.90	12.90	L		
M	W	64	16	12.90	11.50	12.90	12.90	L		
M	H	38	16	8.00	12.90	12.90	12.90	L		
M	W	26	16	12.90	7.90	11.50	9.20	L		ICT*
M	W	38	16	12.90	8.80	12.90	12.90	L		CADD
M	W	45	16	12.01	12.90	12.90	12.90	L		
F	AI	38	16	12.90	10.60	12.90	12.20	L		
F	W	26	16	7.60	7.30	7.40	7.40	L		
M	W	38	16	12.90	11.00	11.50	11.10	L	12.90	
M	W	26	16	12.90	8.40	12.90	12.90	L		
M	W	52	16	12.90	10.60	11.50	11.10	L		
F	W	42	16	12.90	12.90	12.90	12.90			
M	W	38	16	12.90	12.90	12.90	12.90			ET/MT*
M	A	30	16	10.00	8.60	12.90	10.40	L		
M	W	37	16	6.70	12.90	12.90	12.90	L		ET/MT
M	AI	39	16	12.90	12.90	12.90	12.90	L		
M	W	37	16	12.90	12.90	12.90	12.90			
M	W	38	16	7.10	7.60	10.90	9.70	L		
F	W	32	16	12.90	9.30	12.90	11.40	L		
M	W	25	16	12.90	6.90	12.90	10.40	L		
M	W	36	16	12.90	6.00	8.00	6.90	L		
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	54	16	12.90	12.90	12.90	12.90			
M	W	42	16	12.90	12.90	12.90	12.90			ET/MT

SEX	RACE	AGE	EDUCA	Reading	MATH/COM	MATH/CON	Math/Tot	LAB	MATH/RE	CERTS
M	W	36	16	12.90	9.10	12.90	12.90	L		
F	W	47	16	12.90	12.90	12.90	12.90			
M	W	55	16	12.90	12.90	12.90	12.90	L		
M	W	31	16	6.20	8.40	9.30	8.90	L		ET/MT*
M	W	56	16	12.90	12.90	12.90	12.90			
M	W	43	16	12.90	12.90	12.90	12.90			
M	W	33	16	6.30	12.90	12.90	12.90	L		
M	A	31	16	7.90	11.50	10.30	10.90	L		
M	W	40	16	12.90	10.60	9.60	9.90	L		
F	W	24	16	12.90	12.90	12.90	12.90			
M	W	35	16	12.90	12.90	12.90	12.90			
M	W	44	17	12.90	12.90	12.90	12.90			
M	W	61	17	12.90	12.90	12.90	12.90			

Third-Party Evaluation Report

Francis Tuttle Vo-Tech Center

Partnership Project

Prepared by

Barbara Brown Vrana, Ph.D.

The purpose of this evaluation is to examine the stated intent of the Francis Tuttle Vo-Tech Center project and evaluate the project's effectiveness. To perform this study, an in-depth review of the needs assessment, desired outcomes and stated objectives was performed. Most of the following evaluation is based upon qualitative information as little quantitative data was available at the time of this study. It is noted that most of the students participating in the project are enrolled in programs which take longer than 18 months, which is the duration of this project. Hence, complete outcome information is not available.

The needs assessment indicates that students entering the high-tech vocational programs at Francis Tuttle Vo-Tech Center fell short of the desired basic mathematic and reading level necessary to succeed in these high-tech

fields. One of the major activities of this project was the implementation of a full-time Academic Program to assist regular students as well as employees of partner companies in learning the basic skills needed to pursue high-tech training. It has been observed by the evaluator that all students entering the program participated in skill assessment by the Learning Center staff at Francis Tuttle Vo-Tech Center. Students are assessed with the Test of Adult Basic Education (TABE) to identify potential reading or mathematical deficiencies. A composite score of 8.0 total Grade Equivalent in Reading and 12.9 Total Grade Equivalent in Mathematics was used to screen students from lab assignment. Based primarily upon the TABE scores, 68 percent of the students were placed in the remedial lab program. Of the students placed in the lab, a large number (85) scored above the screening level. The students were either self-referred or referred by the academic instructor to the lab for various reasons. Most students used the lab to review mathematical skills. It does not appear that there was any discrimination by gender, age on race in referral to the learning lab.

It is difficult to statistically determine to what degree the learning labs affected student skills as only a small number of students participated in post-testing activities. However, in reviewing the relatively high student completion rate of the high-tech academic programs

it appears that the remediation was successful. Future research should include post tests performed on all subjects to measure effect.

A second main activity of the project was the development and implementation of a performance-based Internship Program. Prior to the implementation of this project, there was little partnership activity between industry and education.

To develop this partnership, the High Tech staff identified businesses which could potentially hire student interns in any one of the five high-tech areas. The staff used academic achievement, attendance and work habits to identify students to participate as interns. Most students who participated in the Partnership program were interviewed by the business prior to acceptance by the business. Some students were placed without an interview. The evaluator feels that the interview process should be used as part of the academic training, and all students would benefit from this activity.

At this time, information was not available as to the number of students in the intern program, or the number of businesses participating. Further data should be gathered on employer satisfaction and placement of students within intern companies upon completion of the program.

The third major activity revolved around the implementation of a Recruitment/Placement Program. As stated in the application document, the objective of the recruitment activity was to increase enrollment in high tech programs by 50 percent. Through a massive advertising campaign, enrollment increased 310 percent.

It appears from the data collected that the minority recruitment campaign was not successful. Information was not available as to whether minorities were specifically targeted in the advertising. Of the entering students, the minority disparity is: 4 percent Black, .9 percent Hispanic, 5.2 percent Asian and .9 percent American Indian. Twenty-three percent of the students were female.

Information was not separated by enrollments into the various academic programs. Further research should determine whether industry needs are being met by the number of enrollments per discipline.

The related placement activities appear to be very successful. Of the 38 students completing within the project duration, 35 were placed. Longitudinal information was not collected regarding tenure of employment or employer satisfaction.

As part of the continuing placement activities, Francis Tuttle Vo-Tech Center developed an up-to-date computerized job bank. This information bank is available to students upon completion of their program of study. The staff participated in local job fairs, and made many contacts with individual companies.

One decided benefit of the Partnership Project to the student was the cooperative agreement entered into between Francis Tuttle Vo-Tech Center and Oklahoma City Community College. The agreement made it possible for students in the vocational program to receive college credit toward an associate of applied science in the high-tech fields. Oklahoma City Community College was allowed to teach general education courses to these students at the campus of Francis Tuttle Vo-Tech, thus further integrating the academic skills into the overall curriculum. The Partnership Project made this cooperative venture possible because of the skill assessment performed on entering students. Without having the skill assessment in place, it would have been unlikely that the community college would have be able to adequately assess and remediate students at the vocational-technical school site.

In summary, the purpose of the Partnership Project grant was to address three main concerns: increased

academic support services; job-specific training; and increased numbers of high technology technicians. Based upon the information provided, the evaluator can determine that the activities have been performed and that the objectives have been met.

Barbara Brown Vrana, Ph.D.

APPENDIX 10
FINANCIAL STATUS REPORT

FINANCIAL STATUS REPORT
(Short Form)
(Follow instructions on the back)

1. Federal Agency and Organizational Element to Which Report is Submitted	2. Federal Grant or Other Identifying Number Assigned By Federal Agency	OMB Approval No.	Page	of
U.S. Dept of Education-Grants Div. Res. & Demo, Mail Stop 4835 Wa. DC 20202	V199A90029	0348-0039	1	1 pages

3. Recipient Organization (Name and complete address, including ZIP code)
Francis Tuttle Vo-Tech
12777 N. Rockwell
Oklahoma City, OK 73142-2710

4. Employer Identification Number	5. Recipient Account Number or Identifying Number	6. Final Report	7. Basis
73-1077928	1-731077928-A1	☒ Yes ☐ No	☒ Cash ☐ Accrual

8. Funding/Grant Period (See instructions) From: (Month, Day, Year)	To: (Month, Day, Year)	9. Period Covered by this Report From: (Month, Day, Year)	To: (Month, Day, Year)
1-1-89	6-30-90	1-1-89	6-30-90

10. Transactions:	I Previously Reported	II This Period	III Cumulative
a. Total outlays		402,130.95	402,130.95
b. Recipient share of outlays		8,811.36	8,811.36
c. Federal share of outlays		393,319.59	393,319.59
d. Total unliquidated obligations			1,175.00
e. Recipient share of unliquidated obligations			175.00
f. Federal share of unliquidated obligations			1,000.00
g. Total Federal share (Sum of lines c and f)			394,319.59
h. Total Federal funds authorized for this funding period			395,760.00
i. Unobligated balance of Federal funds (Line h minus line g)			1,440.41

11. Indirect Expense	a. Type of Rate (Place "X" in appropriate box) ☐ Provisional ☐ Predetermined ☐ Final ☒ Fixed			
	b. Rate	c. Base	d. Total Amount	e. Federal Share
	8%	372,343.47	29,787.48	29,316.00

12. Remarks: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation.

13. Certification: **I certify to the best of my knowledge and belief that this report is correct and complete and that all outlays and unliquidated obligations are for the purposes set forth in the award documents.**

Typed or Printed Name and Title	Telephone (Area code, number and extension)
J. Bruce Campbell, Chairman, Administrative Services	(405) 722-7799 x234
Signature of Authorized Certifying Official	**Date Report Submitted**
J Bruce Campbell	September 5, 1990

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Standard Form 269A (REV 4-88)
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